CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, October 3, 1907.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

(denotes that this work is advertised in Engineering News.)*

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RAILWAYS.

ARKANSAS, OKLAHOMA & TEXAS.—H. B. Denman, Pres. of the Arkansas, Oklahoma & Texas Railroad Co. and also of the Bache-Denman Coal Co., Fort Smith, Ark., states that the line is to be built from Hartford, Ark., on the Rock Island Railway, to a point on the 'Frisco near Montreal. Length of line is to be about seven miles. It is expected to let construction contract soon. Noted on Sept. 19.

BEAVERTON & WILLSBURG.—The contract for building this road from Beaverton to Willsburg, Ore., 11½ miles, has been awarded to the PACIFIC COAST CONSTRUCTION CO., of Portland, Ore. The road is a cut-off to be built by the Southern Pacific to form a connection between the West Side & Yamhill division and the main line at Portland. The work includes the building of a bridge over the Willamette River at Elk Rock, the contract for which has been awarded to ROBERT WAKEFIELD, of Portland. G. W. Boschke, Ch. Engr., Portland, Ore.

BILOXI GREAT NORTHERN.—We are officially advised that company is open for propositions to build its line from parties that can use company's bonds. Right-of-way is mostly secured and survey partially made for a line from Biloxi north to a connection with the Mobile & Ohio R. R., probably at Bucatunna, a distance of 100 miles. W. M. Ducate is Pres.; J. B. Chinn, Vice-Pres.; W. Gorenflo, Treas., and I. Heidemheim, Secy. W. L. Covel is Ch. Engr., at Biloxi. Previously noted.

BIRMINGHAM & GULF CONSTRUCTION CO.—Incorporated to build the lines proposed by the former Tidewater Development Co. Capital, $100,000. The incorporators are Charles H. Stillman and Robert B. Morehead, of New York City, and Joseph A. Vandergrift, of Philadelphia, Pa. The Birmingham & Gulf Railway & Navigation Co. has also been incorporated to succeed the former Tidewater Co. Capital, $3,000. J. M. Dewberry, formerly Pres. of the Tidewater Co., Birmingham, Ala., is Acting Pres.; Joseph A. Vandergrift, of Philadelphia, Gen. Mgr.; Forney Johnston, of Birmingham, Ala., Counsel. Company is also incorporated "to construct, equip and operate railroads, steamboats, factories, canals, terminals, refining plants, gas and electric works, etc."

BITTER ROOT.—This company, an auxiliary of the Oregon R. R. & Navigation Co., has filed new articles of incorporation, being capitalized at $200,000. The line is ultimately to be built from Lapwai Junction, a station on the Northern Pacific 12 miles east of Lewiston, Idaho, up the Clearwater River, following the middle fork and over the Bitter Root mountains to Butte, Mont.

CACHE VALLEY.—H. A. Culver, Second Vice-Pres., Sedgwick, Ark., confirms the report that control of the line has been sold to J. D. Goldman and others of St. Louis, and saying that it will be immediately completed to Paragould, and later on extended south of Sedgwick to Newport. Minority stockholders favor an extension to Hoxie. No contracts have been let yet. J. D. Goldman is Pres., St. Louis; A. Bertig, First Vice-Pres., Paragould, Ark.; H. A. Oliver, Second Vice-Pres., and S. C. Dowell, Treas., both of Walnut Ridge, Ark.; G. W. L. Brown is Secy., Sedgwick, Ark. Noted on Sept. 19.

CANADIAN PACIFIC.—Concerning the report that the C. P. Ry. will double-track its line between Winnipeg and Brandon, Man., 133 miles, Wm. Whyte, Second Vice-Pres., advises us that nothing has yet been done.

CHATHAM, WALLACEBURG & LAKE ERIE.—It is announced that this company, having completed its road to Lake Erie, is planning to extend its line to Wallaceburg. Robert E. Kizer, Chatham, Ont., is Gen. Mgr.

CINCINNATI, BLUFFTON & CHICAGO.—Right-of-way has been secured for an extension of the C., B. & C. R. R. from Bluffton, Ind., to Huntington, 22 miles. Surveys are made and all grading will be completed by Oct. 15. Tracklaying will be started this month. The company now operates 30 miles of line connecting Bluffton, Reiffsburg, Petroleum, Nottingham, Fiat, Balbec, Pennville, Corkwell and Portland. John C. Curtis is Gen. Mgr., at Bluffton.

CRANE RAILROAD.—This company, recently incorporated, owns terminal tracks at Catasauqua, Pa., which have been built for some time, and does not contemplate the construction of any new road. Leonard Peckitt is Pres., and J. S. Stillman, Secy., both of Catasauqua, Pa. Noted on Sept. 12.

CHICAGO SOUTHERN.—Announcement is made that tracklaying on this railroad, which is an extension of the Southern Indiana Ry., from Terre Haute, Ind., to Chicago Heights, Ill., where connection will be made with the Chicago Terminal Transfer R. R., which will afford an entrance into Chicago, was completed on Sept. 24. The construction of this extension was begun in 1904, and during that year and the succeeding year track was laid from Terre Haute to within 64 miles of Chicago. Construction was then suspended until last summer, when financial arrangements were made for the continuation of the work. The total distance is 136.5 miles. H. W. Wells is Gen. Mgr., Chicago.

ELKIN & ALLEGHANY.—Construction has begun with convict labor on the Elkin & Alleghany R. R., which is to be built from Elkin to Sparta, N. C., about 50 miles. H. G. Chatham, of Elkin, is Pres. Line is also to be extended from Elkin to Winston-Salem, about 45 miles.

EUNICE, LAFAYETTE & ABBEVILLE.—Charles D. Caffery, Secy., of Lafayette, La., advises us that contracts may be let soon by this company for building the proposed line from Eunice, La., to Church Point, Vatican, Lafayette, Maurice and Abbeville, 50 miles. No definite steps have been taken yet to secure right-of-way or make surveys. James J. Lewis is Pres., Eunice. Noted on Aug. 22.

FENTRESS COUNTY.—At an election held in Fentress County, Tenn., on Sept. 14, it was voted to subscribe $50,000 to the Fentress County R. R., which it is proposed to build from Johnson Stand, Tenn., to Monticello, Ky., 68 miles. Construction probably will begin in a short time. W. W. Wood is Pres., Jamestown, Tenn. Noted on Aug. 29.

GEORGIA & FLORIDA.—Official statement is made that this road will be 263 miles long, when completed, extending from Augusta, Ga., to Madison, Fla. The completed portions are: From St. Clair to Midville, Ga., 24 miles; from Summit to Vidalia, Ga., 32 miles; from Hazlehurst to Garrant, Ga., 21 miles; from Douglas to Nashville, Ga., 35½ miles; from Valdosta, Ga., to Madison, Fla., 27 miles. The sections to be built, contracts for which have been let to the SCOFIELD CO., of Philadelphia, Pa., are as follows: From Augusta to St. Clair, Ga., 31 miles; from Midville to Summit, 18 miles; from Garrant to Douglas, 17½ miles; from Nashville to Valdosta, 27½ miles. G. B. Hazlehurst is Ch. Engr., and J. M. Turner is Gen. Mgr., Leonard Bldg., Augusta, Ga. Noted on Sept. 5 and Aug. 8.

IDAHO NORTHERN.—The PACIFIC CONSTRUCTION CO., of Portland, Ore., has been awarded the contract for building this road from Kingston to Murray, Idaho, 88 miles. E. P. Spalding is Gen. Mgr., Spokane, Wash. Estimated cost, $875,000.

MISSISSIPPI RAILWAY.—Incorporated in Mississippi to build a railway from Bay St. Louis, Hancock County, north to a connection with the Alabama & Vicksburg Ry. at or near Pelahatchee, Rankin County, and thence north to Grand Junction, Tenn. Incorporators: J. C. Sprague, of Brandon, Miss.; J. E. Thornton, of Pass Christian, Miss.; J. L. Ross, of Mendenhall, Miss. Capital, $100,000, all paid in.

MISSOURI PACIFIC.—The company will reconstruct its passenger yard at Little Rock, Ark., to include about six miles of track, which work will be done by the company's forces. E. F. Mitchell, Engr. Const., St. Louis, Mo.

MISSOURI, KANSAS & TEXAS.—Company has let grading contract to DENIS FEGAN, of Dallas, Tex., in connection with extensive improvement of its Fort Worth, Tex., terminals. All other work is to be done by the company's forces. J. W. Petheram is Ch. Engr., Dallas, Tex.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—We are officially informed that FOLEY BROS.-LARSON CO., of St. Paul, Minn., who have the contract for the extension from Brooten, Minn., to Duluth, Minn., and Superior, Wis., 185 miles, have completed about 110 miles and rails have been laid for distance of 25 miles. Thomas Greene is Ch. Engr., Minneapolis. Noted on Aug. 29.

MUSKOGEE RAILWAY & NAVIGATION.—This company has been incorporated with capital stock of $1,500,000 to build a railroad from Muskogee, Ind. T., to a point on the Fort Smith & Western R. R., in the Choctaw Indian Nation, 55 miles. The incorporators are Ira L. Reeves and S. M. Rutherford, of Muskogee, Ind. T.; C. R. Dean, J. M. Aydelotte and C. H. Gillman, of Shawnee, Okla.

OLYMPIAN SPRINGS & CARLISLE.—J. B. Shaw, Ch. Engr., Salt Lick, Ky., informs us that this company will build a railway about 40 miles long, from Carlisle, Ky., to Sharpsburg, Owingville, Salt Lick and to Olympian Springs. Right-of-way and capital are partly secured and surveys are partly made. J. A. Kauffman is Pres., Salt Lick, Ky.

RANDOLPH & CUMBERLAND.—Surveys for the extension of this road from Hallison, the present terminus, to Ramseur, N. C., have been completed as far as Cheeks, 13 miles north of Hallison. The proposed extension reaches Ramseur by the way of Tillman, High Falls, Cheeks and Enterprise. Grading has been completed from Hallison to Grampus, 1½ miles, and is in progress as far as Tillman, four miles from Hallison. Principal contracts are not yet ready to be let. Ira A. McCormack is Pres., Carthage, N. C.; M. H. Caldwell, Vice-Pres., Carthage; B. M. Fellows, Treas., 111 Broadway, New York; and W. C. Cram, Jr., is Ch. Engr., Hallison, N. C. Noted on Aug. 29.

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10- 5 Heating
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10- 7*Cement
Angele
10-23*Filter
10-25*Dredge,
11- 9 Power
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11-25*Locks,

LIST O

LIGHT, HI

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10- 5 Lightin
Ind.
10-15 Lightin
10-17 Wiring
11- 1*Gas &
11- 8*Lightin
11- 9 Power
11-15 Lightin

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11- 5 Plans

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10- 5 Ditch
10- 5 Ditch
10- 7*Water
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10- 8 Ditch
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10- 9*Boiler
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10-23*Filter
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HUNTINGDON, PA.—Contracts will be let soon by the Raystown Water & Water Power Co. for the construction of Dam No. 1 in connection with the hydro-electric project being promoted by the company. The specifications call for a dam about 500 ft. long and 30 ft. high. Between 5,000 and 6,000 HP. will be developed.

NEW CASTLE, PA.—Merchants on Washington St., between Mill and East Sts., have decided to build a private electric light plant which will furnish electric light to all of the stores in the block. Oliver Moore, M. Winter, Love & Megoun, and Winter Bros., are the promoters. The plant will have a capacity of about 1,000 lights of 16 c.-p. each.

WASHINGTON, D. C.—The following bids were received by Elliott Woods, Supt. U. S. Capitol Building and Grounds, on Sept. 21, for fans, electric motors and heaters for the Office Building, House of Representatives, Washington: B. F. Sturtevant Co., 1536 17th St., Washington, D. C., $18,824; American Blower Co., 141 Broadway, New York, N. Y. $19,300.

Bids were received as follows Sept. 25, at the office of Elliott Woods, Supt. of the U. S. Capitol Building and Grounds, Washington, for furnishing and hanging in the new House of Representatives Office Building all the electric lighting fixtures: Horn & Brannen Mfg. Co., 427 North Broad St., Philadelphia, $16,443; Mitchell, Vance Co., 523 West 24th St., New York, $18,602; Lawrence Gas Fixture Co., 12th and Cherry Sts., Philadelphia, $20,500; J. B. McCoy & Sons, 114 West 30th St., New York, $25,149; Ornamental Art Metal Works, 216 West Houston St., New York, $4,862; CASSIDY & SONS MFG. CO., 133 West 23d St., New York, $12,877 (awarded contract); L. Plaut & Co., 432 East 23d St., New York, $17,981; C. A. Muddiman Co., Washington, $18,530.

FOREST GLEN, MD.—The Forest Glen Land Co., it is reported, is contemplating construction of a central lighting and heating plant in this town. B. Wood Burch, Equitable Bldg., Baltimore, is Pres.

NEWTON, N. C.—The city has awarded contract for construction of electric light plant to SOUTHERN HYDRAULIC CONSTRUCTION CO., Kellogg Bldg., Washington, D. C.

COLUMBIA, MISS.—The Mayor and Town Council are reported to have awarded contract to GRAYSON & ELDER, of Biloxi, Miss., to erect and maintain an electric light plant in the town, granting them a franchise of 25 years. They agree to put in a 20-ton ice plant at the same time.

LAWRENCEBURG, TENN.—Contract for constructing cyclopean concrete dam has been awarded to W. J. NEELY, Columbia, Tenn., and for tunnel to HOWARD NEELY, Chattanooga, Tenn. The turbines and dynamo will be purchased by W. G. Kirkpatrick, Engr., Jackson, Miss.

HARMS, TENN.—The Harms Mill Co. has awarded contract to WILLIAM McDONALD, Nashville, Tenn., for construction of concrete dam 14 ft. at base, 12 ft. high and 5 ft. wide at top, across Elk River at Harms, which will so turn all water at low stages of the river as practically to double the power. Cost is estimated at $5,000.

SEELYVILLE, IND.—Formal announcement has been made of the intention of Frank Fauvre, of Indianapolis, Ind., head of the Fauvre Coal Co., of Terre Haute, to establish an electric power plant near Seelyville to transmit electricity to Indianapolis and other points in this section. A company will be formed with a capital stock of $1,000,000, it is stated. The company has acquired the property of the People's Light & Heat Co., which includes a franchise covering the whole city, until 1930.

*KOKOMO, IND.—Bids are asked until 10 a. m., Nov. 8, by the Board of Public Works, for furnishing electric lights for this city, for streets and public buildings. W. T. Meek is City Clerk.

DECATUR, ILL.—Plans for rebuilding the gas plant of the Illinois Traction System in Decatur have been completed and are in the hands of L. E. Fischer, Gen. Mgr., Danville, Ill., who will advertise for bids for the work. The plans provide for two new buildings. Construction of these will be steel and brick. One will be a retort house, the ground dimensions of which are 112 × 76 ft. This building will have two floor levels. The other will be the purifying house, with ground dimensions of 65 × 112 ft. There will be but one floor. In the new plant coal gas only will be manufactured. In the retort houses there will be room for 16 benches and the capacity of these will be 1,000,000 cu. ft. a day. Only eight benches will go into that house this fall, the remaining eight benches likely going in next year. This building will double the capacity of the present plant. The plant now there can make 250,000 cu. ft. of coal gas in a day.

HIGHLAND, WIS.—The Highland Mining Co., it is reported, will rebuild its $25,000 power plant and concentrating mill which was destroyed by fire.

NEWTON, IOWA.—Extensive improvements and additions will be made to the municipal electric light plant and new machinery and equipment will be installed as follows: One 500-HP. Murray boiler, Murray engine of 500 HP., 500-KW. Westinghouse generator, and a 5-panel switchboard. A. C. Gates is Supt.

OSAGE, IOWA.—The Osage Electric Light, Heat & Power Co. has applied for a license, which will permit it to raise the dam across the Cedar River about 24 ins. The company states that the present dam will not supply sufficient power to operate the present lighting system of the company. Thomas Ferris, Osage, is Gen. Mgr.

JEFFERSON CITY, MO.—The Warden and Board of Prison Inspectors of the Missouri State Penitentiary have awarded contracts as follows for the ventilating, heating and lighting plant for the penitentiary: Boiler house building to JOHN SHORT, Jefferson City, $5,050; steam boilers, to HEINE SAFETY BOILER CO., 1213 Merchant St., St. Louis, $20,400; steam engines, to ST. LOUIS IRON & MACHINE WORKS, Main and Chouteau Sts., St. Louis, $21,200; dynamos, to WESTERN ELECTRIC CO., 611 Wyandotte St., Kansas City, $24,064; motors, to WESTINGHOUSE ELECTRIC & MFG. CO., National Bank of Commerce Bldg., St. Louis, $12,350; conduit and cable work, F. E. NEWBERRY & CO., Century Bldg., St. Louis, $10,252, and pipe work, steam heating and ventilating, PETERS-EICHLER HEATING CO., 1503 Chestnut St., $52,924.

ST. JAMES, MO.—Plans are being made for the erection of a power-house at the Soldiers' Home to take the place of the one recently destroyed by fire. The State Legislature has appropriated $10,000 for the erection of a new plant. Capt. H. E. Warren is Pres. of the Executive Bd.

LAREDO, TEX.—San Antonio and Southwest Texas capitalists will build a plant at the Rio Grande coal mines, it is stated, to furnish motive power for irrigating several thousand acres of land between the mines and Laredo, 26 miles distant. It is planned to construct an electric power line to Laredo, where a substation will be built for furnishing the city with electric lights. About $100,000 will be expended. Construction work will begin within two months under the supervision of Samuel Kahn, Ch. Engr. of San Antonio Traction Co., San Antonio, Tex.

FORT WORTH, TEX.—The Northern Texas Traction Co., it is said, is contemplating doubling the capacity of its power-house, which will involve an expenditure of about $150,000. Stone & Webster, 84 State St., Boston, Mass., are Gen. Mgrs.; H. M. Flanders, Fort Worth, is Ch. Engr.

WAURIKA, OKLA.—The Waurika Public Service Corporation, recently incorporated to operate gas and electric plants, will erect a $50,000 plant, it is reported. The William F. Davis Engineering Co. has prepared plans.

HALLETT, OKLA.—Hallett Pipe Line Heating & Lighting Co., Fayetteville, Ark., will lay 42,000 ft. of 4-in. casing for gas plant, 28,000 ft. of 2-in. pipe, and 3,000 ft. 6-in. pipe for low-pressure gas plant. A. F. Wolf, Pres.; Alva Duncan, Parsons, Kan., Ch. Engr.

PORTLAND, ORE.—The Portland "Telegram" states that the water department has completed survey of the water power sites on the Bull Run River, with a view of establishing a municipal lighting and power system. D. D. Clark is Engr. Water Dept.

REDLANDS, CAL.—The Edison Electric Co., Edison Bldg., Los Angeles, is reported to be considering the construction of a new power-house in the Santa Ana Canyon next year, to use the water of Bear Creek.

LOS ANGELES, CAL.—The Tejunga Power & Water Co. is reported organized with a capital of $250,000 to conserve and develop the waters of Little Tejunga Canyon and distribute it for irrigation purposes in the San Fernando Valley. Bennett's Spring is the source of supply, and it is estimated by the promoters that 400 ins. of water can be developed. C. F. Hunter, Johnston Jones, Dr. J. W. Trueworthy, Byrne Bldg., are reported interested.

OROVILLE, CAL.—It is stated that the Oroville Light & Power Co. is making preparations to begin work on a power plant in Humbug Valley and that representatives of the company visited the Halway place, where an order for 40,000 ft. of lumber was placed with D. L. Haun, to be used in the construction of flumes. William Durbow, Oroville, is Mgr.

SYDNEY, N. S.—The contract for the construction of the power-house of the Sydney & Glace Bay Ry. Co., at Dominion No. 4, has been awarded to RHODES, CURRY & CO., of Amherst, N. S. The cost of the plant and machinery is estimated at $25,000. A. N. McLellan, Sydney, is Mgr.

CALGARY, ALTA.—The Calgary Power & Transmission Co., Calgary, Alta., is about to commence work on its power development at Calgary. The first work to be done is to divert the water from its present course through the gorge. This will be accomplished by tunnelling through the cliff.

STRATHCONA, ALTA.—Bids will be called for soon for laying mains in connection with the $100,000 gas-producing plant to be built here by the International Gas Heating & Lighting Co., Cleveland, Ohio. Cyrus Eaton is Western Mgr.

NEW WESTMINSTER, B. C.—The British Columbia Electric Ry. Co. is making preparations to supply the power necessary to operate the cars on the Chilliwack-New Westminster and the Eburne-New Westminster lines of the railway, which are now in process of construction. The additional power will be supplied by spring, when it is expected that it will be needed to operate the cars on the New Westminster-Eburne branch. The additional plant will practically be capable of developing almost double the amount of horse-power that the present plant at Lake Buntzen is developing. The company has a title to sufficient water from Lake Buntzen to make $45,000 HP. for the use of the railway company. D. J. McQuarrie, New Westminster, is Local Mgr.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

NEW YORK, N. Y.—Bids are asked until 2 p. m., Oct. 10, by J. W. Stevenson, Comr. Bridges, 13-21 Park Row, for the construction of a bridge floor at the Washington Bridge, Boro. of Brooklyn.

TRENTON, N. J.—The contract for repairing Whitehead's Mill bridge has been awarded to RICHARD NEWTON for $3,450. Abram Swan, Jr., is City Engr.

ALLENTOWN, PA.—The Commissioners of Lehigh and Northampton Counties have decided to replace the old structure across the Monocacy River on Broad St., Bethlehem, with a 5-span bridge.

WILMINGTON, DEL.—The contract for the Georgia pine for the Washington St. bridge has been awarded to D. H. MORRIS for $28.90 per 1,000 ft. The contract for white oak was awarded to WILLIAM BARNARD, for $39 per 1,000 ft.

HAVRE DE GRACE, MD.—The contract for the erection of the steel bridge on the Baltimore & Ohio R. R. over the Susquehanna River at Havre de Grace, Md., has been awarded to EYRE-SHOEMAKER CO., of Philadelphia. The bridge will be double tracked throughout; will be 7,000 ft. long, and will take about three years to complete. The cost of construction will be about $2,000,000.

WASHINGTON, D. C.—The WARREN F. BRENIZER CO. has been awarded the contract for filling in the approaches to the Anacostia bridge, for 30½ cts. a cu. yd.

MORGANTOWN, W. VA.—The CANTON BRIDGE CO. has been awarded the contract for construction of an iron and steel bridge over the Monongahela River, for $100,000.

MERIDIAN, MISS.—The Meridian Light & Ry. Co., it is reported, will build overhead bridge across railroad tracks at Meridian, expending about $50,000. A. B. Paterson, Meridian, is Mgr.

SHREVEPORT, LA.—The Police Jury of Bossier Parish and the City Council of Shreveport will meet with the Bridge Engineer and select a site for the new $200,000 bridge to be constructed across Red River here. John M. Dorch is City Engr.

NEWARK, OHIO.—Bids are asked until 1.30 p. m., Oct. 7, by the Commissioners of Licking County, for construction of sub and superstructure for the proposed Church St. bridge at Newark. J. L. Gilpatrick, Newark, is County Surv.

CHILLICOTHE, OHIO.—Bids are asked until noon, Oct. 14, by the County Commissioners, for construction of the substructure for a highway bridge over Dry Run, near Grave's, Liberty Township, Ross County, Ohio. Charles H. Pinto is County Audr.

HAMILTON, OHIO.—Bids are asked until 10 a. m., Oct. 8, by Charles Pabst, County Audr., for construction of a substructure and superstructure of a bridge over Two Mile Creek on the Seven Mile Pike, immediately north of the corporation line of the City of Hamilton.

TIFFIN, OHIO.—The County Commissioners have awarded the contract for repairing the Perry St. bridge over the Sandusky River to the MODERN CONSTRUCTION CO., of Fremont, Ohio, for the sum of $7,397, according to plans and specifications submitted by the bridge company.

CINCINNATI, OHIO.—Plans have been submitted by Charles N. Danenhower, City Engr. to the Board of Public Service, for two lift bridges to span the canal, one at Mohawk Pl. and the other at 14th St. The bridges are to be alike, with a clear roadway of 32 ft. and sidewalks on either side of 6 ft. each. To raise them an engine house to cost $1,000 will be placed alongside the bridges. The cost in all is to be $25,719.

DEFIANCE, OHIO.—The Ohio Electric Ry. Co. has made the County Commissioners a proposition to build a joint bridge across the Auglaize River at this point. The Commissioners had granted the traction company the right to use the present steel bridge at Second St., but it is said that the engineers found that the structure was not strong enough to carry the cars. As a new bridge would be needed within a few years anyway, the company decided to make a proposition for a joint bridge to be 80 ft. wide and four spans long, and built of concrete.

NEAPOLIS, OHIO.—The Toledo, Wabash & St. Louis Ry. Co. has awarded the contract to the TOLEDO-MASSILLON BRIDGE CO., Toledo, Ohio, for construction of a steel bridge at the crossing of Blue Creek, near Neapolis.

HAMMOND, IND.—Bids are asked until noon, Oct. 14, by the Lake County Commissioners, at the office of Charles A. Johnson, County Audr., Crown Point, Ind., for complete construction and erection ready for use, the substructure, superstructure and machinery of a swing bridge over the Calumet River at Columbia Ave., in Hammond, Lake County.

AURORA, IND.—Bids are asked by the Commissioners of Dearborn County, Lawrenceburg, Ind., until noon, Oct. 7, for repair of the bridge over South Hogan Creek, in Aurora. William S. Fagaly is County Audr.

CHICAGO, ILL.—The contracts for the proposed Ashland Ave. bridge over the south fork of the Chicago River has been let to the FITZ-SIMONS & CONNELL CO., 131 La Salle St., for the new sub-structure, for which the firm was the lowest bidder, at $57,172, and the KING BRIDGE CO., Cleveland, Ohio, the superstructure, at a cost of $29,350.

RACINE, WIS.—PETER GALLOWAY has contract to construct the substructure of the Lafayette Ave. bridge, at $8,175, and the MILWAUKEE BRIDGE CO. has contract for superstructure, at $5,900. P. H. Connolly is City Engr.

DES MOINES, IOWA.—Plans are being completed by J. B. Cartlidge, Bridge Engr., Chicago, Burlington & Quincy Ry. Co., Chicago, Ill., for a bridge to cross the railroad's tracks at West Seventh St., Des Moines. The general plans call for a viaduct 52.6 ft. in width, with room for a double car track. It will cost about $175,000.

RUSSELLVILLE, MO.—The courts of Cole and Moniteau Counties have awarded contract for building the bridge across the Moreau River at the Rock House Ford near Russellville to the CANTON BRIDGE CO., of Canton, Ohio, at $6,666. The bids were on cylinder piers and concrete piers.

BELTON, TEX.—The Bell County Commissioners are considering erection of steel wagon bridge costing $25,000 over the Leon River between Belton and Temple, Tex.

STEVENSON, WASH.—Bids are asked until 2 p. m., Oct. 15, by the State Highway Board, Olympia, Wash., for building a 180-ft. span steel bridge across the Washougal River in Skamania County, on State Road No. 8. Bowerman & McCloy, New York Block, Seattle, Wash., are Consult. Engrs.; Joseph M. Snow is Secy. Bd.

WINLOCK, WASH.—Bids are asked until 10 a. m., Oct. 9, by the Commissioners of Lewis County for construction of a bridge over the Olequa Creek, about three miles south of Winlock. Bridge is to have 80-ft. span, 14-ft. roadway in the clear, to be built on the principle of the Howe truss, with four panels of 20 ft. J. E. Stearns is County Audr.

SEATTLE, WASH.—Bids for constructing bridge over Stuck River have been received as follows: P. S. Esterday, $6,884; Puget Sound Bridge & Dredging Co., 95 Yesler Way, $6,500; International Construction Co., $6,840; NORTHWEST BRIDGE CO., $5,852 (awarded contract).

FRESNO, CAL.—The following bids for repairing Lane's bridge have been received by the Supervisors: PACIFIC CONSTRUCTION CO., $9,497 (awarded contract); A. Michaels, $11,250; C. J. Hall, $12,500; Baley & Simpson, $11,600.

FARMINGTON, CAL.—The Board of Supervisors has let contract for erecting a steel span bridge over Oregon Slough, near Farmington, to C. W. SWAIN, at $5,600.

LAKESIDE, CAL.—Bids are asked by the Supervisors of San Diego County, San Diego, Cal., until 10 a. m., Oct. 10, for constructing a pile and trestle bridge over the San Diego River at Lakeside. William H. Francis is County Clerk.

CARSON CITY, NEV.—The contract for construction of three bridges over the Carson River, one at McTarnahan's, one at Lloyd's Crossing, and one at Brunswick, has been awarded by the County Commissioners to GEORGE BROWN, of this city, at $7,710.

CALDWELL, IDAHO.—Bids are asked until Oct. 18, by the Commissioners of Canyon County, for constructing a wagon bridge across Seven Mile Slough. William Noot, Payette, Idaho, is Engr.; O. V. Badley is Clerk of Bd. Comrs.

FREDERICTON, N. B.—Bids are asked until Oct. 7 by the Department of Public Works, Fredericton, for construction of the metal superstructure span on Cocagne Mouth bridge, Kent County, N. B.

FORK RIVER, MAN.—Bids are asked by D. F. Wilson, Secy.-Treas., until Oct. 10 for a Howe truss bridge with two 80-ft. spans across the Mossy River, also for two Howe truss bridges with 60-ft. spans across the Fork River. The bridges may be either of wood or steel.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

PORTLAND, ME.—It is reported that Chickering & O'Connell, Boylston Bldg., Boston, Mass., have completed plans for a convent, to be erected in connection with the St. Joseph Academy. Estimated cost, $150,000.

CHARLESTOWN, MASS.—Proposals for the erection of a State armory in Bunker Hill St., Charlestown, have been opened by the Board of Armory Commissioners, comprising General James P. Parker, George H. Cox and Joseph N. Peterson, and a contract was awarded to the lowest bidder, WHITON-HAYNES CO., for $121,000. There were nine bidders. Plans were prepared by Jaques & Rantoul, 50 Congress St.

NEW YORK, N. Y.—Harry P. Knowles, Arch., for the Masonic fraternity of the State, has filed plans with the Building Superintendent for an extension to the Masonic Hall at 23d St. and Sixth Ave. The extension will be erected upon five plots at 46 to 54 West 24th St. in the rear of the present building. The new structure will have a basement and sub-basement below the sidewalk level and 18 stories above the sidewalk. The front will be of modern French Renaissance, 80 ft. in width and 200 ft. above the curb level; 70 ft. of the lower portion of the front will be granite and Indiana limestone and the remainder of brick and terra-cotta. The structure will accommodate the entire fraternity. In addition to this the six upper stories will be rented for office purposes. Cost, $800,000.

NEW YORK, N. Y.—L. A. Goldstone, Arch., 110 West 34th St., has filed plans for the 6-story apartment house to be erected by the Hensle Construction Co., on plot 100.8 × 145 ft., at the corner of 138th St. and Riverside Drive. The estimated cost of the structure is $225,000.

Plans have been filed for a 12-story apartment house, with stores, to be built by Thomas R. A. Hall on ground owned by Columbia University at the corner of Fifth Ave. and 51st St. The structure will have an avenue frontage of 36 ft., and will be of the Renaissance type, with facades of brick trimmed with either marble or limestone. Alexander McMillan Welch, Arch., 3 West 29th St., estimates the cost at $250,000.

NEW YORK, N. Y.—Bids are asked until 2.30 p. m., Oct. 14, by Robert Hebberd, Comr. Public Charities, for the excavation, masonry, steel and iron roofing and metal work, carpentry, glazing, painting, hardware, electric work and all other work (except plumbing, heating, elevator work, electric wiring and fitting up of the diet kitchens, drug rooms and utility rooms), for the construction and completion of six ward buildings of the Sea View Hospital, situated on the south side of the Manor Road, Township of Castleton, Boro. of Richmond.

NEW YORK, N. Y.—The proposed Belmont tunnel terminal building in Long Island City will occupy the block bounded by Van Alst and Hunter's Point Aves., and Fourth St. will be connected with the Belmont tunnel under the East River to 42d St., Manhattan. The building is to be of reinforced concrete, including the floors, partition walls and roof. The exterior facing for the first and second stories will be laid in gray limestone, and the four upper stories in stucco, or common brick, with red faced brick trimmings. The dimensions will be 175 × 149.9½ ft., including a court for light and air. On the main floor there will

SOUTH CAROLINA.—J. F. Folk, J. Aldrich Wyman and H. J. Brabham, of Bamberg, S. C., have been appointed a committee to secure subscriptions for a proposed railroad, to be about 20 miles long, to connect Bamberg, Ehrhardt, Walterboro and Denmark. Stock book is to be opened on Oct. 3.

ST. LOUIS, SPRINGFIELD & OKLAHOMA WESTERN.—An amended charter granted to this company increases its capital stock from $3,250,000 to $3,750,000. The road will extend from Salisaw, Ind. T., to Lawton, Okla., 250 miles, by way of Sulphur and Stigler, Ind. T. Incorporators include C. S. Stocker, of Stigler; W. T. Douglas, R. Downing, A. D. Goodenough, C. J. Webster and T. S. Hartman, of Sulphur; J. J. Beall, J. D. F. Jennings and A. F. Fricke, of Oklahoma City. Headquarters will be at Lawton, Okla.

TOMAHAWK & EASTERN.—This company, which was recently incorporated in Wisconsin to operate a railroad from Tomahawk to Harrison and from Antigo Junction to Grundy Junction, a total of 21 miles, will not construct any railway at present, we are informed, but will operate an existing line. Capital stock, $25,000. Incorporators: W. T. Bradley, J. W. Froelich, C. H. Grundy, C. C. Uber and A. H. Reid. Principal office, Tomahawk, Wis.

WACO, HAMILTON & BROWNWOOD.—Stephen Turner, Ch. Engr., Waco, Tex., informs us that preliminary surveys are now being made and it is expected to have them completed about Nov. 15. This railroad will be about 130 miles long, connecting Waco and Brownwood. There will be about 50 miles of light work, 30 miles of heavy and 50 miles of medium construction. Capital has not been obtained. James B. Baker, Pres., Waco. Noted on July 18.

WATERLOO, PELLA & SOUTH WESTERN.—B. F. Keables, Pres. Pella, Iowa, advises us that date for letting contracts is uncertain. This company plans to build a railroad from Waterloo, through Pella, to Chariton, Iowa, 120 miles long. Noted on Sept. 19.

WICHITA, CLEVELAND & GULF.—Incorporated in Oklahoma to build a railway from Wichita, Kan., via Cleveland, Okla., to Port Arthur, Tex., 634 miles, passing through Sedgwick, Butler, Cowley and Chautauqua Counties, in Kansas; the Osage Reservation and Pawnee County, in Oklahoma; the Creek, Cherokee and Choctaw Nations in Indian Territory; and the states of Arkansas, Texas and Louisiana. Capital stock, $50,000,000. Incorporators: David Ratjer, J. F. Hethering, J. C. Byers, R. L. Lunsford and A. C. Ecanko, all of Cleveland, Okla.

ELECTRIC RAILWAYS.

WATERBURY, CONN.—John H. Cassidy, Secy. of the Waterbury & Milldale Tramway Co., informs us that this company will let contracts soon for building its line from Waterbury to Milldale, Conn., eight miles. The officers are: Pres., Charles H. Clark, of Milldale, Conn.; Treas., Edwin S. Todd, of Milldale. Directors: Otis S. Northrop, of Waterbury; Charles H. Clark, of Southington; George F. Hughes, of Waterbury; Edwin S. Todd, of Milldale, and John H. Cassidy, of Waterbury. The company is capitalized at $100,000. Survey is made and right-of-way partly secured.

NEW YORK, N. Y.—Bids were received as follows by James W. Stevenson, Comr. Bridges, on Sept. 26, for construction and electrical equipment of the subway station tracks and the electrical equipment of the elevated railway tracks of the Williamsburg (new East River) bridge, over the East River, between the boroughs of Manhattan and Brooklyn: Snare & Triest Co., 147 Liberty St., $390,600; Carlin Construction Co., Kent Ave., Brooklyn, $395,000; F. E. Gore & D. Meehan, 206 Broadway, $243,200.

ALBANY, N. Y.—The United Traction Co., Albany, has awarded to M. F. DOLLARD, of Albany, the contract for excavating, filling and forming the 33-ft. strip owned by the company on the south side of Western Ave., preparatory to laying tracks. It is the company's intention to extend its line from the present terminus at the Manning Boulevard to the Country Club.

ROCHESTER, N. Y.—The Rochester, Scottsville & Caledonia Elec. Ry. Co. has made survey for its line, it is said, from Rochester to Scottsville, Caledonia, Le Roy and Pavilion. From Pavilion, branch lines will extend to Warsaw, Rock Glen, Perry and Glen Iris, a total of 100 miles. E. Strathy is Ch. Engr., Rochester. Le Grand Brown is Consult. Engr., 16 State St., Rochester.

DUBOIS, PA.—R. B. Blakeslee, Supt. United Traction St. Ry. Co., Dubois, advises us that 7½ miles of new extensions are to be built. A. W. SYKES has contract for grading. Three stretches of abandoned roadway of the B., R. & P. R. R. will be used, aggregating three miles. Surveys are made and capital is ready. Right-of-way has been secured. Noted on Sept. 12.

WELLSVILLE, PA.—The Dillsburg & Wellsville R. R. Co. has been organized here to build a line to connect Wellsville with Dillsburg, Harrisburg and other points in the Cumberland Valley. Capital, $75,000. Dr. Augustus C. Hetrick is Pres., Wellsville.

GREENCASTLE, PA.—The governor has approved the application of the Chambersburg, Greencastle & Waynesboro St. Ry. Co. for an extension of its system from Greencastle to Chambersburg. Practically all right-of-way has been secured. Construction probably will be commenced at the Greencastle terminus. Connection may be made with the Chambersburg & Gettysburg system at Chambersburg. The line will pass through Kauffman, Rhodes Grove, Marion and Guilford Springs. The company has been reorganized, and will increase its capitalization. This increase has been practically all subscribed by local people, who had previously organized the Chambersburg & Southern Electric Ry. Co. to build a line from Chambersburg to Greencastle, and thence to Mercersburg and McConnellsburg. This enterprise has now been merged with the Chambersburg, Greencastle & Waynesboro Company, which will develop these extensions. A. C. Shryock is Ch. Engr., Waynesboro, Pa.

COVINGTON, GA.—The Middle Georgia Interurban Ry. Co., which recently made application for a charter, is not yet ready to let contracts, we are officially informed. As previously noted, this company was organized by Charles F. Howe, of Milledgeville, Ga.; William F. Smith, Robert F. Smith and Samuel P. Smith, Flovilla, Ga.; Stephen J. Smith, Jackson, Ga.; Charles F. Preston, James W. Preston, Lawrence W. Roberts, Charles F. Robert and Ralph E. Watson, Atlanta. It is proposed to construct, equip and maintain a line of railroad from Griffin, Jackson, Mansfield and Social Circle, through the counties of Spalding, Butts, Jasper, Newton and Walton, with branch or branches from some convenient point or points to Flovilla, in Butts County, and Monticello, in Jasper County. The length of the new line will be about 70 miles, running in an easterly and northerly direction. Capital stock, $200,000.

AUGUSTA, GA.—The Augusta & Aiken Ry. Co., which now extends from Augusta to Aiken, S. C., 27 miles, may be extended from Aiken to Columbia, S. C., about 90 miles. James U. Jackson is Gen. Mgr., at Augusta.

QUITMAN, GA.—O. K. Jelks, Pres. of the Blue Springs Improvement Co., and promoter of the Quitman, Valdosta & Thomasville Electric Railway & Power Co., states that the latter company has been duly chartered and organized to build an electric railway from Valdosta to Thomasville, Ga. It is expected to begin construction at Quitman, building thence to Blue Springs, whence it will be continued to Valdosta; then the line is to be built west of Quitman. Noted last week.

MACON, GA.—W. J. Massey, Pres. of the Macon & Albany Interurban Railway Co., and also Vice-Pres. of the Macon, Griffin & Atlanta Interurban Co., is quoted as saying that the money has been raised and construction will begin on these lines before Jan. 1, 1908.

ATHENS, GA.—The Richardson-Wey Engineering Co., of Atlanta, Ga., and DeCamps & Cunningham, Engrs., of Anderson, S. C., have been selected to act jointly as engineers on the preliminary and location surveys of the Georgia-Carolina Ry. and to make a comprehensive report of the projected line from Athens, Ga., to Anderson, S. C., about 75 miles. W. L. Hodges, of Hartwell, Ga., is Pres. The report is to cover both a steam and an electric railroad proposition.

TROY, ALA.—A plan to build an electric railway from Troy to Orion, 13 miles, via Milo, is being promoted by Fox Henderson, L. M. Bashinsky and Will Chancy, of Troy.

GENEVA, ALA.—Richard Tillis, of Montgomery, has announced that he will soon begin construction of the proposed electric railway from Geneva to Dothan, Ala., via Hartford and Slocomb. When it is completed the line will be extended to Union Springs, Troy, Eufaula, Clayton and Montgomery. First section is to be about 40 miles long and will cost about $500,000.

MEMPHIS, TENN.—An ordinance has been approved granting franchises to the proposed Clarksdale, Collierville & Covington Interurban Railroad Co., represented by W. A. Percy.

MANSFIELD, OHIO.—We are officially advised that the Delaware, Mt. Gilead & Mansfield Elec. Ry. Co. will build a line connecting Delaware, Mt. Gilead and Mansfield, which are the county seats of Delaware, Morrow and Richland Counties, respectively. It will be about 50 miles long. While surveys have been made, right of way has been only partly obtained. Capital has not been secured yet. Noted on Sept. 19.

SPRINGFIELD, OHIO.—The new franchise ordinance for the Indianapolis, Columbus & Eastern Traction Co., recently passed by the City Council, has been formally accepted by the officials of the road and the work of building the promised terminals will be begun at once.

PRINCETON, IND.—The Evansville & Southern Indiana Traction Co. has awarded the contract for the construction of its extension from this city to Patoka to JONES BROS., of Columbus, Ohio. The length of the extension is 4½ miles, and includes five bridges, which will be erected by the LAFAYETTE ENGINEERING CO., of Lafayette, Ind.

CARTHAGE, ILL.—A petition has been filed by the Mississippi Valley Electric Railway Co. with the State Board of Railroad and Warehouse Commissioners asking for permission to cross at grade the Wabash R. R. at Carthage, Hancock County. The Mississippi Valley line is to be constructed from Carthage west to Keokuk, Iowa, and from Hamilton, opposite Keokuk, Iowa, through Nauvoo to Fort Madison, crossing the Santa Fe bridge at Fort Madison and the Keokuk & Hamilton bridge at Keokuk. T. R. Smith is Prin. Asst. Engr., 1034 Rookery Bldg., Chicago. Noted on Sept. 19.

ALTON, ILL.—The Alton, Jacksonville & Peoria Ry. Co. will extend from Alton to Jacksonville, Ill., 66 miles, by way of Godfrey, Jerseyville, Carrollton, White Hall and Roodhouse. Tracklaying and overhead construction are said to be completed from Alton to Godfrey, six miles. Construction of the remainder of the line is to begin about Oct. 15. A. O. Auten is Pres. W. R. Heagler, Ch. Engr. J. M. Rhoads, Secy., Jerseyville, Ill.

MADISON, WIS.—We are officially advised that W. Brenton Welling, 2 Wall St., New York, is interested in promotion of the Madison, Four Lakes & Chicago Ry. which will build a line from Madison to Zanesville, 36 miles. Surveys are made. Contracts will be let when capital is secured. Daniel B. Ely, 2 Wall St., New York, is Mgr. Noted on Aug. 8.

JOPLIN, MO.—The general contract for building an extension of the Joplin & Pittsburg Ry. has been let to A. L. REGISTER & CO., 112 North Broad St., Philadelphia, Pa. The road is in operation from Columbus, Kan., north via Scammon, Wier, Chicopee and Pittsburg to Frontenac, 32 miles. One extension is being built from Frontenac north to Curranville, five miles; one from Pittsburg southeast to Joplin, Mo., 25 miles, and another, from Scammon west to Mineral, 5½ miles. About five miles of the extensions have been finished. Maximum grades 1.4% and maximum curves 4°. There will be four steel bridges for which contracts are let. Joseph J. Heim, Pres., Kansas City, Mo.; W. W. Calhoon, Vice-Pres., Carthage, Mo.; J. A. Prescott, Secy. and Treas.; R. E. Richardson, Ch. Engr., Kansas City, and D. L. Robinson, Asst. Secy. and Treas., Buffalo, N. Y. Noted on Sept. 19.

RUSSELLVILLE, ARK.—The Russellville & Ozark Mountain Traction Co. has made survey and secured right-of-way for building electric line from Russellville, Ark., north to Dover, 10½ miles. A. J. Robinson is Pres., Pine Bluff, Ark.

DALLAS, TEX.—We are officially informed that the Dallas Interurban Elec. Ry. Co. will build from Dallas to Terrell and also a local system in Dallas; total length, 60 miles. I. J. Willingham and J. Mercer Carter are Gen. Mgrs., 310 North Texas Bldg., Dallas. Surveys are made and right-of-way obtained. Capital is partly secured. D. E. Waggoner, Dallas, is Pres. Noted on Aug. 22.

SLIDELL, TEX.—J. B. Doyle, of Slidell, advises us that citizens of that place are trying to interest some company to build an electric line from Denton to Bowie, via Slidell.

ENID, OKLA.—John R. Clover, Treas. of the Enid, Blackwell & Osage Interurban Traction Co., Enid, advises us that this company expects to purchase material, etc., within 30 days for its proposed line which will connect Enid, Pawhuska and Blackwell, 130 miles. Surveys for four miles have been made and right-of-way secured for this distance. Sid Hudkins is Pres., Enid, Okla. Motive power will be gasoline. Noted on Aug. 8.

MANGUM, OKLA.—The Southwestern Interurban Railway Co., capital $1,000,000, has been chartered to build from Mangum via Francis to Hollis, 37 miles; also from Mangum to Granite and Coldell, 40 miles, with a branch from Granite to Hobart, 15 miles; also from Mangum to Altus, 27 miles; total line 139 miles. The incorporators are W. T. Funderburg, D. J. Doyle, E. E. Pinkerton, T. P. Clay, H. M. Ferguson and R. C. Echols, all of Mangum, Okla.

WEATHERFORD, OKLA.—The Oklahoma Central Interurban Railway, Telegraph, Telephone, Light & Power Co., with $5,000,000 capital, has been chartered to build an electric railway from McAlester, Ind. T., via Holdenville, Wewoka, Shawnee, Oklahoma City, El Reno, Geary and Weatherford to Cheyenne, Okla., 500 miles. The estimated cost of construction is $17,000 per mile. Branches are also to run from McAlester north to Checotah and Muskogee; south from McAlester to Atoka and Durant; north from Holdenville to Okemah and Okmulgee; south from Wewoka to Ada; north from Shawnee to Chandler and Stillwater; south from Shawnee to Pauls Valley, Davis and Ardmore; north from Oklahoma City to Guthrie and Perry; south from Oklahoma City to Norman and Purcell; north from El Reno to Kingfisher and Enid; south from El Reno to Chickasha and west to Anadarko and Lawton; north from Geary to Watonga; north from Weatherford to Taloga; south from Weatherford to Cordell, Hobart and Mangum, and north to Sayre and Elk City, 528 miles in all. The incorporators are C. D. Freeman, of Denver, Colo.; Leon Brown, of St. Louis, Mo.; B. F. Sharp, of Memphis, Tenn.; G. M. Watson, of Nevada, Mo.; Louis Landman, of Jefferson City, Mo.; Dr. R. X. Wade, J. B. Bloucher, F. M. Stone and H. H. Codington, of Weatherford.

TULSA, IND. T.—J. Robert Burnham, Ch. Engr. of the Mid-Continent Traction Co., Tulsa, advises us that company will let contracts in about 30 days for construction of its line. Right-of-way is partly secured. Survey has been begun. The line will be 21 miles long and will run from Tulsa to Red Fork, Sapulpa and the Glen Pool oil field. F. L. Smart, Kansas City, Mo., is Pres.; Graham Burnham is Secy., Tulsa. The railway will connect three towns and accommodate a population of about 50,000. Previously noted.

LA JUNTA, COLO.—The Arkansas Valley Traction Co. has been organized to build an electric railway to Rocky Ford, a distance of eleven miles. Surveys are made and right-of-way 75% secured. Company will issue $100,000 of 6% bonds about January, 1908, for construction of its proposed line. No contracts will be awarded until these bonds are disposed of. John E. Gauger is Pres., Rocky Ford. F. T. Lewis is Ch. Engr., La Junta.

TRINIDAD, COLO.—Frank P. Read, Pres., has announced that this company will build an extension to Cokedale, eight miles west, and to Hastings, 18 miles north of Trinidad. The city lines will also be extended to cover several streets through the south side residence district. Work is to be started as soon as the bonds are disposed of. T. F. Grover is Gen. Mgr. and Pur. Agt.

NORTH YAKIMA, WASH.—The time limit in the franchise requiring the Yakima Valley Transportation Co. to have three miles of track completed and in operation by Jan. 1, 1908, has been extended to Sept. 1, 1908, thus giving the company eight months more in which to do the work necessary to save its franchise. A. J. Splawn is Pres.

WALLA WALLA, WASH.—An ordinance has been introduced at a meeting of the City Council granting C. L. Whitney, his successors and assigns, in behalf of the Walla Walla County Fair Association, a franchise for the operation of an electric line three-quarters of a mile in length from the fair grounds.

BOISE, IDAHO.—At a recent meeting of the stockholders of the Boise & Interurban Railway Co., all of the old directors were elected, as follows: W. E. Pierce and L. A. Coate, Boise; J. Kennedy, S. H. Jennings and T. B. McKaig, Pittsburg; N. Murphy, Philadelphia; M. B. Gwinn, Pendleton, Ore. The company has decided to double-track its line as far as the Pierce Park, nearly four miles down the valley, and the work probably will start before winter. Company will also erect a station in Boise. F. H. Knox, Pittsburg, Pa., is Ch. Engr.

SAND POINT, IDAHO.—An ordinance will soon be placed before the Council asking for a 25-year franchise granting authority to Chas. R. Foss, John C. Emery and Peter Johnson to build, maintain and operate a steam or electric railway on the streets of Sand Point. They offer to have the road in operation within a year, and state that they have the capital to put the project through.

VANCOUVER, B. C.—The directors of the British Columbia Electric Ry. Co. have voted to spend $1,000,000 during 1908 in improvements to the system and for extensions. R. H. Sperling is Gen. Mgr., Vancouver, B. C.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

RICHFORD, VT.—The Swanton Gas & Electric Co. will establish a power plant here. It is reported, using about 450 HP. This firm has begun erection of a cement house, 21 ft. wide, 15 ft. deep, and about 250 ft. long, leading from the mill dam to the power plant. It will erect a grist mill this fall, and this and the saw-mill will be run by electricity. Next year the company will erect a furniture factory to replace the burned structure.

PROVIDENCE, R. I.—The Providence "Journal" states that announcement of the intention of the Narragansett Electric Lighting Co. to build a tunnel under the Providence River has been made. It is stated that the company has had trouble in maintaining insulation on the cables laid in the mud. For the purpose of maintaining efficiency, the company has decided to build a waterproof conduit from a point near South St. to the east shore of the Providence River. The estimated cost of this improvement is said to be $40,000. Plans for a tunnel to take the electric cables of the Narragansett Electric Lighting Co. are on file at the City Hall. The tunnel shown on the plan will make it possible to remove overhead cables from the streets along the river and Crawford St. bridge. The diameter of the tunnel contemplated is about eight feet and its length will be about 400 ft. Marsden J. Perry is Gen. Mgr. William C. Woodward is Ch. Electrician, Providence.

TERRYVILLE, CONN.—McCabe & Behler, the contractors who are excavating a tunnel through the mountain for the New York, New Haven & Hartford R. R. Co., have decided to erect an electric light plant in order to complete the underground work. The plant will provide for at least 200 lamps of 32 c.-p.

DANIELSON, CONN.—The New York, New Haven & Hartford R. R. Co., has recently appropriated $40,000 for improvements to the Dyer Dam electric plant, about one mile south of this village. It is proposed to take out the two 400-KW. generators now in the plant and install new ones of more modern type, and to change the type of the motor power machines. W. S. Murray, New Haven, Conn., is Electrical Engr.

NEW YORK, N. Y.—The Bureau of Yards and Docks, Washington, D. C., has awarded to the GENERAL ELECTRIC CO., Schenectady, N. Y., contract for furnishing 15 motor-generator sets and accessories, at the Navy Yard, New York, at $61,500.

NEW YORK, N. Y.—Bids are asked until 3 P. M., Oct. 17, by the Park Board, for furnishing all the labor and materials necessary to wire and light and make repairs to the Soldiers' and Sailors' Arch, Prospect Park, Brooklyn. Samuel Parsons is Pres.

NEW YORK, N. Y.—The following bids were received on Sept. 26 by James W. Stevenson, Comr. of Bridges, for the construction and electrical equipment of the subway station tracks and the electrical equipment of the elevated railway tracks of the Williamsburg Bridge over East River, between the Boroughs of Manhattan and Brooklyn: Snare & Triest Co., 147 Liberty St., $390,600; Carlin Construction Co., Kent Ave., Brooklyn, $395,000; F. E. Fore & D. Meehan, 206 Broadway, $243,200.

WADDINGTON, N. Y.—We are officially advised that the New York & Ontario Power Co. is calling for bids on the first 10,000-HP. installment at the company's site at Waddington. The remaining 20,000 HP. will be proceeded with directly the first is completed.

SCHENECTADY, N. Y.—The HUDSON VALLEY CONSTRUCTION CO. has the contract for a boiler, engine and purifier house and generator building for the Mohawk Gas Co., Schenectady.

YONKERS, N. Y.—The Board of Aldermen has authorized the Committee on Public Lighting to have gas mains laid and Welsbach lamps installed in Pelham St.

DUNKIRK, N. Y.—The American Locomotive Co., 111 Broadway, New York, is asking for bids for the construction of a $30,000 power-house, to be erected at the Brooks Locomotive Works, on the Roberts Road. H. C. Hequembourg is Pur. Agt., New York.

NAPANOCH, N. Y.—The contract for furnishing and erecting the structural steel and iron work for power-house and stack at the Eastern New York Reformatory at Napanoch, N. Y., has been awarded to the LANE BRIDGE CO., of Painted Post, N. Y.

HAMMONTON, N. J.—The Town Council has let contract to the HAMMONTON ELECTRIC LIGHT CO. and the HAMMONTON & EGG HARBOR CITY GAS CO. to light the streets of the city for a term of five years. The contract amounts to about $4,000 per year. H. R. Garrison, Hammonton, is Supt., Hammonton Electric Light Co.

be an arcade extending through the entire building. The arcade will be 30 ft. in width by 175 ft. in length, with 20 or more stores on either side. There will be a mezzanine floor 60 × 134 ft., divided into eleven suites of offices. The second story will be devoted entirely to offices, numbering 35. On the third, fourth, fifth and sixth stories will be 72 5 and 6-room apartments, with baths and other conveniences. Entrances to all apartments will be from the street direct. Thompson & Frohling are Archs.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Oct. 14, by Joseph Bermel, Pres. Boro. of Queens, for rebuilding the interior of the Queens County court-house at Long Island City, together with all the work incidental thereto, excepting all that provided for in the previous contract.

The following bids were received on Sept. 30, by Robert W. Hebberd, Comr. Public Charities, for erection and completion of Coney Island Hospital, Boro. of Brooklyn: Clarke & Stowe, 221 Greenpoint Ave., Brooklyn, $347,300; Luke A. Burke Sons & Co., 25 West 42d St., $359,713; P. J. Carlin Construction Co., Kent Ave., Brooklyn, $339,711; R. B. Ferguson, Claremont Ave. and 119th St., $342,800; Peter Cleary, 235 Bainbridge St., Brooklyn, $349,990; Daniel J. Ryan, 723 Third Ave., Brooklyn, $343,800; F. T. Nesbit Construction Co., 116 Nassau St., $338,500; Richard E. Henningham, 1 Madison Ave., $328,475.

ITHACA, N. Y.—It is reported that WILLIAM P. BANNING, 242 South Fourth Ave., Mt. Vernon, N. Y., has contract to erect an addition to the Dingbat Rescue Home at Sheldrake. Estimated cost, $100,000. Subcontracts will be let. Burrows & Young are Archs.

SYRACUSE, N. Y.—We are officially advised that the Syracuse University, of Syracuse, has awarded to the CONSOLIDATED ENGINEERING & CONSTRUCTION CO. a contract for its proposed gymnasium. It will be of steel frame construction, three stories high, with dome, trimmed with ornamental terra-cotta, pressed brick and granite, and provided with apparatus and swimming pools. This gymnasium will cost about $350,000, and will be used in connection with the new reinforced concrete stadium which is being completed for the University.

LONG BEACH, L. I., N. Y.—Seymour Davis, 16th and Chestnut Sts., and Paul A. Davis, Archs., Philadelphia, Pa., have invited estimates for a $1,000,000 hotel building to be erected for Jason Waters at Long Beach, L. I. The building will cover an area measuring 700 × 400 ft., and will be five stories high. It is designed in French Renaissance style, and will be of fireproof construction, with an exterior facing of brick, granite and terra-cotta. On the front of the building will be a clock-tower rising to a height of 150 ft. The hotel will have 700 bedrooms, each having a private bath. Each of these will be supplied with both hot and cold, fresh and sea water. Among the larger rooms will be a dining-room measuring 200 × 180 ft.

GARRISON, N. Y.—H. H. VOUGHT & CO., 122 West 42d St., New York, has general contract for a 4-story concrete residence, at Garrison, N. Y., for Evans R. Dick, to cost $500,000. Plans were prepared by Wilson & Butler, Pittsfield, Mass.

POUGHKEEPSIE, N. Y.—Percival M. Lloyd, Arch., 45 Market St., Poughkeepsie, is about to let contracts for an 8-story apartment building, 110 × 90 ft. (Scott's Chambers), at 26-30 South Hamilton St., Poughkeepsie, for Miss Susie E. Scott, Poughkeepsie. Press brick and limestone, ornamental and structural iron work will be used in construction. Cost, $150,000.

ALBANY, N. Y.—The bids received by George L. Heins, State Arch., on Sept. 25, for the making of borings on the site of the Education Building, at Albany, were as follows: (1) Wash borings; (2) Diamond drill core borings; (3) working days to complete: The Foundation Co., 115 Broadway, New York, (1) 60 cts. per lin. ft.; (2) $5 per lin. ft.; (3) 25 days. Shafer, Post & Parsons, Tweddle Bldg., Albany, N. Y., (1) $1.74 per lin. ft.; (alternative bid of same firm) (1) $1.90 per lin. ft.; (2) $4 per lin. ft.; (3) 25 days. Phillips & Worthington, 66 Liberty St., New York, (1) 90 cts. per lin. ft.; (2) $9.75 per lin. ft.; (3) 25 days. The award will be made by the Trustees of Public Buildings, of which Charles E. Hughes, Governor, is Chn.

PATERSON, N. J.—Contracts will be let at once for construction of an apartment house to be erected at Ward and Clark Sts., at a cost of $200,000. The building will be built for the Paterson Realty Co., lately organized, and will contain 400 rooms. It will front 187 ft. on Clark St. and 118 ft. on Ward St. Charles E. Sleight, 129 Main St., Paterson, is Arch.

DANVILLE, PA.—At the State Hospital for the Insane, at Danville, bids were opened for erection of a women's infirmary, a building for acute insane men patients and a building for acute insane women patients. The names of the bidders and the amounts are as follows: Lawrence Bros., Kane, Pa., $246,248; L. H. Focht & Son, Reading, Pa., $197,300; George W. Beard & Co., Reading, $198,800; W. O. Weaver & Son, Harrisburg, $208,947; Steinbach-Billmeyer Co., Lewistown, Pa., $217,100; Metzger & Wells, Heed Bldg., Philadelphia, $188,700; Mosier & Summers, New Statler Hotel, Buffalo, $202,300; Bennett & Woodnut, Williamsport, $207,291; Lynch Bros., Lippincott Bldg., Philadelphia, $186,197; George H. Meyerholtz, Philadelphia, $249,817. T. P. Reitmeyer, Williamsport, Pa., is Arch.

NEW CASTLE, PA.—It is stated that it is proposed to build a new court-house for Lawrence County at New Castle, Pa. Cost, $800,000.

PITTSBURG, PA.—Of ten bids submitted to F. P. Booth, County Comptroller, Sept. 27, for construction of $1,000,000 Soldiers' Memorial Hall, to be in the Oakland District for Allegheny County, seven were thrown out. They were considered too high. The plans for a granite or marble building probably will have to be changed, or a building of either of those materials will have to be given up altogether. The three bids that are to be given further consideration by the Commissioners were selected from those of the companies making the lowest bids on each of the four materials considered, (a) sandstone, (b) buff limestone, (c) granite and (d) Pennsylvania blue marble. The firms are: P. W. Finn, North Highland Ave., Pittsburg, lowest on marble; A. S. Wilson Co., 541 Third Ave., Pittsburg, lowest on sandstone and buff limestone; J. C. Robinson & Son, New Custom House, New York, N. Y., lowest on granite. The bids submitted follow: P. W. Finn, (a) $954,234, (b) $897,634, (c) $1,114,004, (d) $1,112,004; Henry Shenk Co., (a) $1,038,873, (b) $1,009,962, (c) $1,191,750, (d) $1,268,537; William Miller & Sons Co., (a) $997,800, (b) $984,800, (c) $1,184,800, (d) $1,256,800; A. & S. Wilson Co., (a) $898,700, (b) $886,568, (c) $1,034,600, (d) $1,142,600; C. H. Kerr Co., (a) $1,254,047, (b) $1,188,187, (c) $1,398,817, (d) $1,[illegible]047; J. E. & A. L. Pennock, (a) $1,087,009, (b) $1,079,000, (c) $1,279,000; John Pierce Co., (b) $959,000, (c) $1,159,000; J. C. Robinson & Son, (a) $924,333, (b) $899,333, (c) $1,062,333; Ambrose B. Stannard, (a) $1,097,000, (b) $1,069,000, (c) $1,220,000, (d) $1,320,000; John Gill & Sons, (a) $998,000, (b) $983,000, (c) $1,175,000; (d) $1,240,000. There is about $900,000 available for the proposed memorial, and the lowest bidders under the specifications providing for granite or marble overreach this amount by considerable sums. The architect and Commissioners will go over the plans for the purpose of making any eliminations in them that are possible in the hope of reducing the cost of the building so that granite or marble may be used in the structure. It is likely that the contract will not be let for several days.

ALLEGHENY, PA.—C. M. Bartberger, Arch., Westinghouse Bldg., Pittsburg, has been selected to prepare plans for the proposed Tenth Ward school-house, at Allegheny. Cost, $125,000.

ERIE, PA.—Eisenwein & Johnson, Archs., 777 Ellicott Sq., Buffalo, N. Y., have let general contract to MOSIER & SUMMERS, New Statler Hotel, Buffalo, for a hotel, at Erie, for Wellington Downing. Cost, $400,000.

PHILADELPHIA, PA.—Moore & Co., Inc., have been granted a permit for a building, to cost $175,000, for the Locust Realty Co., which will be erected on the site of the old Free Quaker Burial Ground, on Fifth St. below Locust St. The plans, by Ballinger & Perrot, 1200 Chestnut St., provide for a 5-story building of reinforced concrete construction, with exterior walls of brick. The dimensions will be 118 × 200 ft.

*WASHINGTON, D. C.—Bids are asked until 2 p. m., Oct. 24, by Bernard R. Green, Supt. of Const., National Museum, for concrete roofing, green slate roofing, copper roofing and skylights for the National Museum.

ROANOKE, VA.—J. T. Strickland has awarded contract to C. W. HANCOCK & SONS, of Lynchburg, Va., for store and office building in Roanoke, to cost $125,000.

NORFOLK, VA.—The contract for the naval Young Men's Christian Association here has been awarded to JOHN HENRY MILLER, 110 Dover St., Baltimore. The lot having cost $75,000, the sum of $225,000 is available for the new structure, work upon which will begin at once.

SELMA, ALA.—Bids were received as follows Sept. 30 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for construction of a post-office building in Selma, Ala.: Algernon Blair, Montgomery, Ala., $139,800, Feb. 1, 1909; H. A. Bishop, 218 La Salle St., Chicago, $138,250, two years; King Lumber Co., Charlottesville, Va., $119,300, Feb. 1, 1909.

SOMERSET, KY.—The Directors of the Farmers' National Bank have awarded the contract to GEORGE T. HOOD & CO., it is reported, for erection of a bank building. Estimated cost, $125,000.

TOLEDO, OHIO.—E. O. Fallis, Arch., The Nasby, has let general contract to H. J. SPEEPER CO., Michigan St., for constructing a 2-story granite bank building, at West Huron and Adams Sts., for the People's Saving, Loan & Building Co., Nasby. Cost, $140,000.

CLEVELAND, OHIO.—Bids are asked until 3 p. m., Oct. 21, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for constructing the interior partitions and mason work and installing mechanical equipment at the U. S. post-office, custom-house, to be three stories high, 120 × 225

FLINT, MICH.—Bids are asked until 3 p. m., Nov. 5, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for construction of U. S. post-office at Flint.

*EAST ST. LOUIS, ILL.—Bids are asked until 3 p. m., Oct. 28, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction (including plumbing, gas-piping, heating apparatus, electric conduits and wiring) of the U. S. post-office and court-house at East St. Louis.

CHICAGO, ILL.—Huehl & Schmid, 163 Randolph St., are preparing preliminary plans for a mercantile building at 286-290 Fifth Ave., for Washington Porter, 77 Jackson Boulevard. Building will be ten stories high, 60 × 100 ft., of brick, steel and concrete construction, with composition roof, plate glass, electric wiring, nickel plumbing, steam heat. Cost, $150,000.

Dean & Dean, 218 La Salle St., are reported to have let the mason and carpenter contracts to H. A. LEAFGREEN, 138 East Washington St., for an addition to a hotel building, at 1250 Michigan Ave., for the New Southern Hotel Co., Alex. Drybburgh, Mgr. The hotel will have eight stories, will be 125 × 140 ft., built of brick and stone, of fireproof construction. Cost, $200,000.

Plans are being completed by C. A. Eckstorm, 131 LaSalle St., for a mercantile building for Edwin S. Hunter, at the corner of Madison and Market Sts. It will be twelve stories high, 62 × 100 ft., built of brick, stone and steel. Cost, $300,000.

EAU CLAIRE, WIS.—Bids were received as follows Oct. 1 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Eau Claire: Northern Construction Co., Milwaukee, Wis., $134,000; Paul Riesen & Sons, Milwaukee, $124,937, 24 months; Newman & Hoy, Chamber and Commerce Sts., St. Paul, Minn., $142,253, Sept. 1, 1909; General Construction Co., Milwaukee, $133,594; Lauritzen Bros., Fergus Falls, Minn., $125,895; P. M. Heminway Construction Co., St. Paul, $120,662; Charles W. Gindele, 3333 La Salle St., Chicago, $125,150; William Lister, Chippewa Falls, Wis., $163,997; Chippewa Falls Construction Co., Chippewa Falls, Wis., $162,093; J. W. Miller, St. Paul, $116,927. Time of completion, April 1, 1909, unless otherwise stated.

OMAHA, NEB.—Thomas R. Kimball, McCague Block, has let general contract to CAPITAL CITY BRICK & PIPE CO., Ramge Bldg., for constructing a 9-story warehouse, 100 × 120 ft., with first floors of reinforced concrete, upper floors mill constructed, at Ninth and Johns Sts., for Paxton Gallager Co. Cost, $150,000.

LINCOLN, NEB.—Fiske, Diemann & Meginnis, Archs., 516 Richards Bldg., Lincoln, have let general contract to SHAW & ASSENMACHER for an addition to hotel on Ninth and P Sts., for Thompson Hotel Co., F. J. Richards, Mgr. Cost, $125,000.

ST. LOUIS, MO.—G. C. Goodlet and associates have had plans prepared by E. Ross Chamblin, 620 Chestnut St., for apartment house, to be three stories high; 120 × 225 ft., with gas and electricity. Cost, $150,000.

Mauran, Russell & Garden, Chemical Bldg., have prepared plans for a 7-story mercantile building, 50 × 150 ft., to be erected at 13th St. and Washington Ave., for Lindell Gordon, 112 North Eighth St. Brick and stone, architectural and structural iron and steel work will be used in construction. Cost, $150,000.

The Holbrook-Blackwelder Real Estate Trust Co., 812 Olive St., is reported to be contemplating erection of a mercantile building at Tenth and Olive Sts., to cost about $400,000. W. J. Holbrook is Pres.; George H. Blackwelder is Secy.

LITTLE ROCK, ARK.—The St. Louis Southwestern Ry. Co. will expend about $150,000, it is reported, in construction of terminals, including erection of freight and passenger station. M. L. Lynch, Tyler, Tex., is Ch. Engr.

TACOMA, WASH.—The Seattle "Morning Times" states that plans for the Imperial Building, which is to be 24 stories high, covering a floor area of 48 acres, have been completed by E. W. Houghton, Arch., Collins Bldg., Seattle. The building will be 415 ft. long, with a 200-ft. frontage. It will have 20 elevators, and will contain manufacturing concerns and commercial institutions. A hotel will be in one section of the building, and it will contain 500 rooms. Trains of the Northern Pacific Ry. Co. will run directly into the building and freight cars will be lifted to the floors of the firms to whom their contents have been consigned. The cars will be lifted by means of hydraulic cranes. The building is to be erected by the Imperial Development Co., of Tacoma, interested in which are J. C. Donnelly and Edmund Croft, of Tacoma, and A. P. Gillies, of Seattle. Two passenger bridges 600 ft. long will run to the building, 75 ft. above the ground over the yards of the Northern Pacific. The supports of the bridges will be modeled as towers, containing elevators to carry passengers from the ships and trains.

SEATTLE, WASH.—The Building Inspector has granted a permit to the Washington Securities Co., Globe Bldg., for the erection of a 10-story steel frame office building at Third Ave. and Stewart St., to cost about $300,000.

LOS ANGELES, CAL.—Plans are being prepared for the erection of the Hamburger Majestic Theater, at the west side of Broadway, just north of Ninth St. Edelman & Barnet, 233 South Broadway, Los Angeles, are Archs. Mayberry & Parker are Constructing Engrs. Cost, $225,000.

SAN FRANCISCO, CAL.—The THOMPSON-STARRETT CO., 2053 Sutter St., San Francisco, has been awarded the contract to erect a 3-story building on the corner of Stockton and O'Farrell Sts. for the D. Samuels Lace House Co., Sutter St. and Van Ness Ave., to cost $300,000. Meyers & Ward, Kohl Bldg., are Archs.

OTTAWA, ONT.—R. L. Logan, Asst. to Second Vice-Pres., Grand Trunk Ry. System, Montreal, advises us that Bradford L. Gilbert, 50 Broadway, New York, N. Y., and Ottawa, has prepared plans for the proposed terminal passenger station and hotel, which will be known as the Chateau Laurier, to be built for the G. T. R. here. It is proposed to connect the hotel and station by a subway. The two structures will face the square formed by the intersection of Dufferin and Sapper's bridges with Rideau St.

The station, as designed for the Ottawa Terminals Railway Co., which is controlled by the Grand Trunk Ry., is approximately 150 ft. square; main waiting-room, ticket office, concourse, etc., being located on the track level adjoining a new station plaza, 90 × 180 ft., for carriages, baggage wagons, streets cars, etc., similar to the Bonaventure Station plaza at Montreal. Adjoining this plaza and the station proper the train-shed, 150 × 800 ft., will extend alongside the Rideau Canal, and will cover the passenger platforms, 20 ft. wide, and over 1,000 ft. in length, and nine tracks. The shed will connect with the Alexandra Bridge. This train-shed is designed to be used for the accommodation of various railway companies. The Rideau St. level will be approximately 22 ft. higher than the tracks. At the center of the building at this level will be an interior portico and lobby with a stairway to waiting-room below; also elevator service. The exit stairway from the train-shed and concourse will extend to the intersection of Sapper's Bridge at the Rideau St. level, as at present from the old station. The mezzanine floor between grades contain the offices of the train master, service rooms, and station are to be arranged for the upper floors structure will be fireproof. The framework of steel, throughout, with A separate annex is to be of stone, line of Sussex St., and at the axis and express rooms, also baggage ors and trainmen, for conductors, power plant, etc. The area of principal rooms is approximately as follows: General waiting-room, 52 ft. square, wings, each 50 × 50 ft. and 40 ft. long, woman's room, 52 × 32 ft. with lavatory, etc.; men's smoking-room, ft. square; union ticket office, 52 × [illegible] ft. square; lunch room, 52 × 35 ft.; sleeping-car; telegraph office and information bureau, 15 × 20 ft.; train despatcher's room, ft. square; telephone booth, news stand, [illegible] room, etc., as required. There will be [illegible] second-class accommodation, a public corridor, 155 × 50 ft., union baggage room 90 × [illegible] and express room 50 × 50 ft. The [illegible] ground area to be utilized for terminal, approaches, etc., amounts to over [illegible] sq. ft.

The Chateau Laurier will [illegible] over 300 bedrooms and 125 baths. In keeping with the Parliament buildings, also the new Departmental buildings, soon to be erected, the station and hotel for the Terminal Railway Co. have been designed in French Gothic style. Estimated cost of station, $1,[illegible]; hotel, $1,500,000.

WINNIPEG, MAN.—William Mackenzie, Pres. of the Canadian Northern R. Co., Toronto, Ont., is reported to have stated that final plans have been approved for the joint terminals to be erected here by the Grand Trunk Pacific and Canadian Northern railways. Estimated cost, about $[illegible],000,000. M. H. McLeod is Gen. Mgr., Winnipeg.

EDMONTON, ALTA.—Plans are being completed by William Fingland, 490 Main St., Winnipeg, for the new Provincial Parliament buildings here, to cost approximately $1,000,000. Contracts for construction will be let this fall.

VICTORIA, B. C.—The Y. M. C. A. has plans for a building to cost about $1,000,000. W. G. Findlay is interested.

WATER SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

*POUGHKEEPSIE, N. Y.—Bids are asked until 3 p. m., Oct. 9, by the State Commission in Lunacy, Albany, for two new boilers at central group, Hudson River State Hospital, Poughkeepsie. T. E. McGarr, Secy.

ROME, N. Y.—We are officially advised that the following bids were received by the Board of Water Commissioners on Sept. 25 for constructing the Fish Creek intake dam and tunnel: G. H. Eldridge, Ossining, N. Y., $160,723; New York Continental Jewell Filtration Co., 15 Broad St., New York, $166,851; A. C. Martin & Co., Seneca Falls, N. Y., $107,250; F. D. Grannis, Ossining, N. Y., $147,409; D. W. Rosser, Kingston, Pa., $129,431. All bids were rejected. New bids will be received early in the winter. Knight & Hopkins, Rome, N. Y., are Engrs.

BUFFALO, N. Y.—Bids are asked by the Department of Public Works until 11 a. m., Oct. 15, for the sale and removal of two pumping engines, known as engines Nos. 5 and 3, at the pumping station, Bureau of Water, Buffalo. F. G. Ward is Comr.

ROCHESTER, N. Y.—Whitmore, Rauber & Vicinus, 279 South Ave., Rochester, are low bidders on the contract to lay 12-in. Holley water mains in the streets included in Group 212. The bids were opened by the Board of Contract and Supply on Sept. 18. The figures of Whitmore, Rauber & Vicinus were $7,433. H. B. Hooker & Son bid $9,102, and Ripton & Murphy $10,961. The Holley mains are to be reinforced to give greater fire protection in the First, Second and Fourth Wards. The streets in which the work is to be done are: Brown, from Mill to Warehouse; Warehouse, from Brown to Platt; Platt, from Warehouse to Allen; Plymouth Ave., north, from Main St. west to Allen; Church, from State to Plymouth Ave., north; Mill, from Brown to Factory; Ely, from South Water to Stone. In these streets the small pipes will be taken out and the 12-in. mains substituted. Over a mile of the pipe is to be laid. Edwin A. Fisher is City Engr.

SYRACUSE, N. Y.—Final work on the survey of another of the proposed sites for an auxiliary reservoir which is to form a part of the new conduit line to Skaneateles Lake has been completed by a corps from City Engineer's office. This is the second site surveyed, and like the first one, is of greater altitude than the present reservoir. It is planned to begin work on the conduit line as soon as spring opens if the appropriation by the last Legislature is sanctioned at the coming election. The total cost of the line is expected to be $2,000,000. Henry C. Allen is City Engr.

ORANGE, N. J.—Contracts for the final work of completing the water supply and distribution additions are reported to have been awarded as follows: For concrete work on new reservoir and gate-house, JOHN W. HELLER, of Brooklyn, N. Y., for $52,825; the WARREN FOUNDRY & MACHINE CO., 160 Broadway, New York, N. Y., secured contract to furnish c.-i. pipe for $[illegible],285. R. H. KERNAN, of South Orange, secured contract to lay the pipe, for $27,950. Fred. T. Crane is City Engr.

*PHILADELPHIA, PA.—Bids are asked until noon, Oct. 22, by George R. Stearns, Dir. Dept. Public Works, for improvement, extension and filtration of the water supply, for the following contracts: No. 109, electric equipment for Torresdale filters; No. 126, pumping engines for Lardner's Point pumping station; No. 127, boilers, Torresdale station; No. 128, centrifugal pumping engine for Torresdale pumping station; No. 134, magnesia covering and painting at Lardner's Point pumping station.

WILMINGTON, DEL.—Henry E. Baton, Philadelphia, Pa., is estimating on plans for a filtration plant and water supply system for the city of Wilmington. The plant will include six filters, two reservoirs having a capacity of 9,500,000 and 35,000,000 gallons respectively, a superintendent's house measuring 11.6 × 16.3 ft., a machine house 23.6 × 20.4 ft., and a gate-house 18.6 × 17 ft.

*ATLANTA, GA.—Plans and specifications are on file in the office of Engineering News, New York, for furnishing and erecting horizontal sectional washing pressure filter plant, as advertised. The plant will consist of eight units, each unit to be 8 ft. in diameter and 20 ft. long, minimum capacity of plant to be 4,000,000 gallons daily when one unit is out of service during the washing period. Bids are asked by the Board of Water Commissioners, Park Woodward, Gen. Mgr., until 4 p. m., Oct. 23.

PENSACOLA, FLA.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., has awarded to the CHICAGO BRIDGE & IRON WORKS, Throop and 105th Sts., Chicago, Ill., contract for the construction of a 100,000-gallon steel tower and tank, with suspended 15,000-gallon steel tank and tower, for the Pensacola Navy Yard, at $10,500.

OPELOUSAS, LA.—Union Irrigation Co. has completed financial arrangements, it is stated, for construction of its canal, and proposes to begin work at once. Plans and specifications have been prepared. The initial canal installation will be sufficient to irrigate 30,000 acres. The pumping station will be of brick construction on concrete foundation. Discharge basin or beginning of main canal will be located 75 ft. above Gulf level, and will make it possible to irrigate eventually 1,500,000 acres without relift installation. The initial plant will have one lift. Contract awarded to R. D. WOOD CO., 400 Chestnut St., Philadelphia, Pa., for pump to lift 75,000 gallons per minute, maximum capacity, 100,000 gallons; contract for two 1,3000-HP. engines with surface condensers awarded to RUSSELL ENGINE CO., Massillon, Ohio; contract for four water-tube boilers awarded to E. KEELER CO., Williamsport, Pa. The Union Irrigation Co. has purchased elevating graders, wheel scrapers and dump wagons, and traction engine. This equipment will be used for constructing canal, work to begin about Oct. 10. Offices of Union Irrigation Co. are at Opelousas and at Lancaster, Pa. J. Franklin Schell is Gen. Mgr.

NEW ORLEANS, LA.—List of itemized bids received on Sept. 4 by the Sewerage and Water Board, for hauling and laying approximately 250 miles of 4-in. to 30-in. c.-i. water pipe, aggregating about 26,000 tons, divided into four contracts, is given in this week's issue under Contract Prices.

LOUISVILLE, KY.—The ALLIS-CHALMERS CO., Milwaukee, Wis., has secured contract from the Louisville, Ky., waterworks for a 24,000,000-gallon daily capacity, vertical, triple-expansion pumping engine. Cost, about $250,000.

COLUMBUS, OHIO.—The Board of Public Service is reported to have opened bids Sept. 18 for laying two 36-in. water mains to connect the new water softening and filtration plant with the city pumping station, as follows: W. C. Halliday, $162,590; Chas. C. Taylor & John M. Beckett, $163,683; Westwater & Casey, Dublin Park, $163,907.

CINCINNATI, OHIO.—The Board of Public Service on Sept. 18 awarded contracts for water meters, with ⅝-in. connections, to the AMERICA VALVE & METER CO. and NEPTUNE METER CO., 90 West St., New York, N. Y.; PITTSBURG METER CO., East Pittsburg, Pa.; THOMPSON METER CO., of Brooklyn, and BUFFALO METER CO.

The contract for laying water mains in various parts of the city have been awarded to AUGUST SILK, at $9,000.

LANSING, MICH.—The contract was let by the Aldermen to THOMAS FISHER for the construction of a drain in East St., from Michigan Ave. to Shiawassee St., at a cost of $3,500, his bid being the lowest. H. A. Collar is City Engr.

CHICAGO, ILL.—John Hanberg, City Hall, Comr. of Public Works, has let the contract for foundation to the AMERICAN ENGINEERING & CONSTRUCTION CO., 112 Clark St., and for the superstructure to the B. M. ZADECK CO., 135 Adams St., for an addition to the Lake View pumping station. It will be 1-story, 71 × 174 ft., of brick and steel, and cost $150,000. Walter Shaw, 325 City Hall, is Engr.-in-Charge.

EAST ST. LOUIS, ILL.—Bids are asked by the Board of Drainage Commissioners, District No. 1, 344 Collinsville Ave., East St. Louis, until noon, Oct. 5, for about 1,000,000 cu. ft. of excavation for ditches in St. Clair County; also construction of certain levees along the line of said ditches, together with all necessary clearing and grubbing.

NAUVOO, ILL.—The Mississippi Valley Traction Co., which secured a water-works franchise from Nauvoo recently, has let the contract for the construction of a waterworks system in Nauvoo to WILLIAMS & McKITCHIE, of Chicago. The water-works will cost about $150,000.

COKATO, MINN.—W. D. LOVELL, 1415 Eighth St., S. E., is reported to have secured the contract for constructing water-works, at $8,372.

DULUTH, MINN.—The contract for constructing and installing two electric booster pumps at 46th Ave. N. and Grand Ave. has been awarded to FAIRBANKS, MORSE & CO., Franklin and Monroe Sts., Chicago, Ill., at $4,225. L. M. Case is Mgr.

EMPORIA, KAN.—It is probable that a pump will be installed in the city pumping station. G. A. Matthews is City Engr.

EXETER, NEB.—The contract for constructing a system of water-works for Exeter has been let by the Village Board to the NATIONAL CONSTRUCTION CO., of South Bend, Ind.

ABERDEEN, S. DAK.—The Water and Sewer Committee is reported to have recommended the building of a reservoir and standpipe, at a cost of $14,000. D. C. Washburn is City Engr.

GREGORY, S. DAK.—The WESTERN ENGINEERING CO., of Yankton, S. Dak., has been awarded the contract to install a complete water system at Gregory. The bid was $11,852.

RUSSELLVILLE, ARK.—JAMES G. LYONS, of Muskogee, Ind. T., has the contract to build the water-works plant at Russellville, at $36,920.

WHARTON, TEX.—The ALLIS-CHALMERS CO., Milwaukee, Wis., has contract to install machinery and pumps for the Wharton Irrigation Co., at about $50,000. The irrigation plant will be located two miles west of Wharton on the Colorado River, and it is proposed to water 25,000 acres of land. John W. Maxcy, Consult. Engr., Houston, Tex., states that 15 miles of main canal will be constructed this year, or before the time for watering next season's crop. This, with the laterals, will water from 10,000 to 12,000 acres of land.

CHANDLER, COLO.—G. R. Gwillin has organized the Chandler Water Co., it is stated, and will construct a reservoir to hold 4,502,800 cu. ft. of water to be taken from the flowing artesian wells near the town of Chandler, and which will be used for irrigation next spring. The reservoir will be 80 ft. deep, 200 ft. long, and will cost $25,000. If there is any water in excess of that required for irrigation it will be used for power purposes.

DELTA, COLO.—Bids are asked for building a 32-in. siphon. It is proposed to build a reservoir, but no bids have been asked as yet for this work. E. P. Martin is Engr., Paonia, Colo.

AUBURN, WASH.—Contract for the construction of the city water system has been awarded to W. F. McMAHON, C. E., of Auburn, at $13,090, to be completed in 90 days. The supply will be taken from springs on the bluffs west of Christopher Station.

SEATTLE, WASH.—Bids are asked until 10 a. m., Oct. 5, by C. B. Bagley, Secy. Bd. of Public Works, for constructing water mains in North and West 80th St.; estimated cost, $17,100.

ARROWHEAD SPRINGS, CAL.—For the purpose of aerating the water of the Arrowhead reservoir in the mountains, now in progress of construction, a contract was let on Sept. 20 to ARTHUR S. BENT, 235 South Los Angeles St., Los Angeles, for construction of a concrete tower, 184 ft. high and 13 ft. in diameter. This tower will cost about $15,000, and will rise out of the lake at the mouth of Outlet Tunnel No. 1. It will be fitted with valves and screens for the purpose of controlling the immense pressure and the aerating of the water.

*TUCSON, ARIZ.—Bids are asked until 8 p. m., Nov. 4, by Frank S. Treat, City Recorder, for construction of a system of waterworks. Charles F. Slack, Mayor.

*PHOENIX, ARIZ.—Bids are asked until 3.30 p. m., Nov. 15, by Robert Craig, Supt. W.-Wks., Phoenix, for completing proposed improvements to the city water system.

SHELLEY, IDAHO.—Bids will be received about Dec. 1 for the construction of waterworks to cost about $6,500. N. N. Holm, of Shelley, is Engr.; Fred. C. Mickelson is City Clerk.

MONTREAL, QUE.—P. McGOVERN, 6 Beacon St., Boston, Mass., has secured the contract for the construction of the underground conduits for the civic water-works system. It will be five miles long and eight feet in diameter. George Janin is Ch. Engr. and Supt. M.-W. Noted Sept. 12.

HULL, QUE.—The water-works system of Hull will be improved and extended, it is stated, at a cost of about $39,800.

HAMILTON, ONT.—The Fire, Water & Light Committee, Hamilton, Ont., will install two electric pumps at the civic water-works plant at a cost of about $50,000. These pumps will have a capacity of 10,000,000 gallons per day.

*WINNIPEG, MAN.—Bids are asked until noon, Nov. 15, by the Chairman of the Board of Control, for supply of about 15 miles of assorted water pipe. H. N. Ruttan is City Engr.; M. Patterson is Secy., Bd. of Control.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

WESTFIELD, MASS.—Oren E. Parks, Town Engr., states that DANIEL A. DOREY, of Natick, Mass., has secured the contract for building Sec. 14 of storm water sewers, for which bids were received on Sept. 18, at $7,076. P. A. McIntyre, of Mattapan, Mass., bid for this work $7,930.

NEW YORK, N. Y.—The bids received Oct. 1, by Louis F. Haffen, Pres. Boro. of the Bronx, for completing the contract which was executed by William J. Flanagan on March 2, 1906, and was declared abandoned Aug. 28, 1907, for the construction of the storm relief tunnel sewer from the Webster Ave. sewer near Wendover Ave., in the Mill Brook water shed (sewerage District No. 33), to the Harlem River, about 231 ft. north of High Bridge, 24th Ward, Boro. of the Bronx, were: Wakefield Construction Co., $637,300; Phoenix Construction Co., 4[illegible] Park Row, $600,487; John J. Hart Co., Pugsley Ave., The Bronx, $468,852; Williams Engineering & Contracting Co., 13 Park Row, $477,577.

NEW YORK, N. Y.—Bids are asked until noon, Oct. 8, by George Cromwell, Pres. Boro. Richmond, for building sewers in Sewer District 19 A, Third Ward, Boro. Richmond.

Bids were received on Sept. 18 by Bird S. Coler, Pres. Boro. Brooklyn, for sewers in Flatbush Ave. extension, Section 1. Each bidder stated for what percentage of the standard, as stated below, he would contract to furnish all the materials and do all the work for the sewers and appurtenances, and upon this percentage the comparison and tests of the bids will be made. Estimate of engineer and unit prices to be considered and taken as 100 per cent. of the cost. Engineer's estimated cost is $46,897. The bids were as follows: Murphy Bros., Brooklyn, 137 9-10%; John J. Creem, 889 Greenpoint Ave., Brooklyn, 114⅞%; Hammond & Sloane, 60 Wall St., 136%; Leon E. Kelly, Brooklyn, 118½%; Joseph L. Carey, 190 Montague St., Brooklyn, 118 18-100%.

Bids received on Sept. 18 by Bird S. Coler for sewers in Flatbush Ave. extension, Section 2: Engineer's estimate, $18,407. The bids were as follows: Hammond & Sloane, 60 Wall St., 116%; John J. Creem, 889 Greenpoint Ave., Brooklyn, 112½%; Joseph L. Carey, 190 Montague St., Brooklyn, 108 18-100%; Leon E. Kelly, Brooklyn, 122%.

RYE, N. Y.—G. Everett Hill, Vice-Pres. and Gen. Mgr. of the City Wastes Disposal Co., 156 Fifth Ave., New York, the Supervis. Engr. of the new sewers for Rye village, has stated that plans will be ready in about a month for this project.

SEA CLIFF (L. I.), N. Y.—G. Griffith Clapham, Village Clk., states that the proposed sewage disposal system will cost about $50,000. Nothing definite has yet been done. Dr. H. G. Wahlig is Health Officer. Noted last week.

DUNKIRK, N. Y.—Common Council has awarded sewer contracts as follows: Central Ave., city line to depot, two miles long, $11,-641, to LAWRENCE SCHULTZ, of Fredonia, N. Y.; Jerboa and Armadilla Sts., R. C. RUTHVEN. The MEISTER CONTRACTING CO. was awarded contracts for the Second St. culvert and the Lake Road bridge extension. FRED. A. GOTT was awarded the contract for Martin St. and for the Fox St. sewer. Patrick Goggin, of Fredonia, was lowest for Canary St.

ONEIDA, N. Y.—Bids are asked until 5 p. m., Oct. 15, by the Board of Public Works for constructing a sewer in Williams, Elm and Lake Sts.

ROCHESTER, N. Y.—The lowest bidder on the new sewer system for the 21st Ward and part of the Twelfth Ward was H. N. Cowles. His bid was $85,430.

*SOUTH ORANGE, N. J.—Bids were received as follows on Sept. 17 by the South Orange Township Committee for construction of sewers in (a) Maplewood District, and (b) South Orange Heights District. For (a) the contract was awarded to JAMES J. FUSCO, Montclair, N. J., at $21,615. The other bids were: Chas. Ippolito, Orange, N. J., $21,881; Steele & Bave, Owego, N. Y., $22,334, and Eveline Bros., New Britain, Conn., $25,232.

Bids for (b) were: PASQUALE CESTONE, Montclair, $17,496 (awarded contract); Jas. J. Fusco, Montclair, $18,002; John Driscoll, Orange, $18,456; Steele & Bave, Owego, N. Y., $18,764; Chas. Ippolito, Orange, $19,486; Eveline Bros., New Britain, Conn., $21,115; R. M. Rosser, Kingston, Pa., $22,215, and James A. Christie, Newark, $25,796. Itemized bids are given under Contract Prices in this issue. Alex. Potter is Engr., 143 Liberty St., New York.

CARLISLE, PA.—The State Health Department is reported to have approved the double contract system of sewerage for this city, which will cost about $111,359. This will include the district bounded by North, South, East and College Sts.

READING, PA.—The City Council has passed an ordinance providing for the issue of $40,000 of bonds for building storm water sewers; and also for the construction of house drain sewers, etc., in District 12.

*PHILADELPHIA, PA.—Bids were received by the Department of Public Works, George R. Stearns, Dir., on Sept. 11 for sewers, Schedules B, C, D and E. Contracts have been awarded as follows: Schedule B, Main Sewers: Extension of Thomas Run system in Florence Ave., etc.; 1,572 ft. of 5-ft. to 5½-ft. brick sewer; awarded to LOMBARDI & PASCUZZI, at $23,127. Extension of Market St. sewer to 36th St.; 156 ft. of 5-ft. brick sewer; to EDWIN H. VARE, Betz Bldg., at $3,925. Extension of Wissahickon lower level intercepting sewer; 1,590 ft. of 3½-ft. brick sewer; to DAVID PEOPLES, Betz Bldg., at $28,620. Extension of Wissahickon high level intercepting cut-off sewer; 1,267 ft. of 6-ft. brick sewer in tunnel; to EDWIN H. VARE, at $47,840. Extension of sewer in Bingham St. and Wyoming Ave.; 1,791 ft. of 3½-ft. to 4¾-ft. brick sewer; to LOMBARDI & PASCUZZI, at $13,840. Extension of Jackson St. sewer from 33d to 29th Sts.; 1,846 ft. of 6½ to 7-ft. brick sewer, to DAVID PEOPLES, Betz Bldg., at $36,121. Twelfth St. sewer from Louden to Ruscomb Sts.; 1,073 ft. of 3½ to 4-ft. brick sewer; to PATRICK DURKIN, at $8,020. Ninth St., Butler and Tenth Sts. sewer, from Erie Ave. to Luzerne St.; 2,054 ft. 4¾ to 5-ft. brick sewer; to R. P. BENNIS, at $24,495. Schedule C—Branch Sewers: 32 contracts for brick sewers less than 3½ ft. in diameter. Estimated cost, $100,000. Contracts for Schedule C were awarded as follows: WILLIAM A. RYAN, 1219 Dickinson St., for Allison St. sewer; LOMBARDI & PASCUZZI, for Arch St., Haddington St., Nippon St., Redfield St., Rockland St. and 61st St. sewers; ROBT. P. RYAN, 2116 North 30th St., for Midvale Ave., Cedar Ave. and Chelten Ave. sewers. DONATO DELISE, for Coulter St., Fifth St., Henry St., Jefferson St., McMichael St. and 60th St. sewers. J. JOSEPH McHUGH, 1206 North 52d St., for Edgewood St. sewer. DAVID McMAHON, 600 East Chelten Ave., for Fox St., Jefferson St., Pomona St. and Slocum St. sewers. ALFONSO PERNA, for Juniper St. sewer. JOHN J. CONNOR, 4912 North Broad St., for Old York Road, Rockland St. and 13th St. sewers. HOWARD E. RUCH, for Rockland St. sewer. JOSEPH McANALLY, for Opal St. sewer. DANIEL S. BADER, Land Title Bldg., for Russel St. and Schiller St. sewers. ADOLPH JAFOLLA, for Tioga St. sewer. RICHARD BENNIS, for Vaux St. sewer. Schedule D: inlets, laterals, etc. Estimated cost, $5,000. Schedule E: Reconstruction of Pine St. sewer; 300 ft. of 8-ft. brick and concrete sewer; to MILLARD CONSTRUCTION CO., Arcade Bldg., at $25,000. George S. Webster is Ch. Engr.

HARRISBURG, PA.—C. F. HESSENBERGER has been awarded the contract for building the sewer system at the Pennsylvania South Mountain Sanatorium, at $11,006, by the State Health Commissioner.

WASHINGTON, D. C.—Bids were received as follows Sept. 30 at the office of the Commissioners of the District of Columbia for construction of sewers: I. H. Fisher, Ontario Pl., Washington, (a) excavation, 86 cts. per cu. yd.; (b) sewer brick masonry, $20; (c) 18-in. pipe, $1.15 per lin. ft.; (d) 15-in. pipe, $1.10; (e) rock excavation, $4. E. G. Gummel, 300 Rhode Island Ave., Washington, (a) 89 cts.; (b) $20; (c) 89 cts.; (d) 84 cts.; (e) $4. James A. Coyle, Washington, (a) $1.10; (b) $22; (c) $1.50; (d) $1.40; (e) $4. Warren F. Brenizer Co., Washington, (a) 73 cts.; (b) $17; (c) $1.14; (d) 99 cts.; (e) $3. R. J. Beall Construction Co., Washington, (a) 89 cts.; (b) $19.50; (c) $1.27; (d) $1.15; (e) $4.

*NEW ORLEANS, LA.—Bids were received by the Sewerage and Water Board, George G. Earl, Gen. Supt., on Sept. 11, for constructing approximately 110 miles of sewers and appurtenances. The sewers will range in size from 8 to 27 ins., 5 to 17 ft. deep, and will include about 1,230 manholes and 443 flush tanks. We are officially advised that these bids, on sewerage contracts "Y," "Z," "27-S" and "28-S," have been rejected, the lowest bid on each contract exceeding what the Board would consider a fair price for the work involved.

ZANESVILLE, OHIO.—The Board of Public Service has accepted the plans and profiles of Henry I. Buell, Engr. for the southwestern sewer district. Nineteen miles of sewer pipe will be required.

SPRINGFIELD, OHIO.—W. H. Sieverling, City Engr., estimates cost of proposed 8-in. sanitary sewer in North Limestone St., from McCreight Ave. to the Grube Road, at $6,-914. The estimate for the sanitary sewer in West Main St., from Yellow Spring St. to Western Ave., is given as $23,227.

BATAVIA, OHIO.—Bids are asked until Oct. 7 for the purchase of $5,725 of sewer bonds. G. H. Kain is Village Clerk.

COLUMBUS, OHIO.—Bids are asked until Oct. 4 by the Board of Public Service, Edward F. McGuire, Secy., for constructing the East Side sewage pumping station. Estimated cost, $50,000. Henry Maetzel is City Engr.

CINCINNATI, OHIO.—The DOUGLASS PLUMBING & HEATING COMPANY has been awarded the contract by the Board of Public Service for the construction of the Duck Creek branch of the new sewage disposal system, for $18,145.

CHAGRIN FALLS, OHIO.—We are officially advised that bids are asked until Oct. 14, by H. D. Bishop, Village Clerk, for the construction of a sewerage system and sewage purification plant. Plans may be seen and blank proposals obtained at the office of the Walter P. Rice Engineering Co., Cleveland, Ohio. Estimated cost, $60,000.

CANTON, OHIO.—We are officially advised that on Sept. 3, Wise, Wise, Smith & Shekels, Canton, submitted the lowest bids for constructing brick and pipe storm sewer on Navarre St., at $9,459 and $9,640, respectively. W. E. Sarver is City Engr.

LAKEWOOD, OHIO.—Bids are asked until 11 a. m., Oct. 7, by B. M. Cook, Village Clerk, for furnishing material and labor for a sewer in Detroit St.

STEUBENVILLE, OHIO.—Bids are asked by the Board of Public Service until noon, Oct. 14, for necessary material and labor for constructing a sewer on Clinton St. from Sixth to Third Sts. north to the Ohio River.

AURORA, IND.—Bids are asked until Oct. 11 by the Common Council for constructing a sewer in District No. 1, to be composed of 6 to 20-in. salt-glazed vitrified pipe, manholes, catch-basins, etc. Estimated cost, $12,500. Fred. D. Johnston is City Clerk.

BARTLESVILLE, IND.—Frank B. Hornett, City Recdr., has stated that about $50,000 will be expended for sewers. Estimated cost is $5,000. E. C. Yarmeth is City Engr.

BRAZIL, IND.—George A. Fletcher, City Engr., is reported to have stated that a survey will probably be made this month for the proposed sewerage system for the south side of city.

INDIANAPOLIS, IND.—Bids are asked until Oct. 7 by the Board of Public Works for the construction of the East Michigan St. sewer, to cost about $146,000. It will be of concrete on brick and pipe, and the size will range from 12-in. to 7 ft. in diameter. Blain H. Miller is City Engr.

FT. WAYNE, IND.—ANTON REIG has been awarded the contract for the construction of a sewer in Barthold St., at 85 cts. a yd. The contract for the sewer in Spring St. also was awarded to Mr. Reig, at 89 cts. for 12 and 15-in. pipe.

NORTH CHICAGO, ILL.—Bids were received as follows Sept. 27 at the Bureau of Navigation, Navy Dept., Washington, D. C., for the construction of sewers and drains at the Naval Training Station, North Chicago, Ill.: Henry C. Patterson, Waukegon, Ill., $58,415; H. D. Hallett, Aurora, Ill., $55,390; Nash Bros., 84 La Salle St., Chicago, $50,999; T. H. Eigelhart, Morgan Park, Ill., $50,000.

SUPERIOR, WIS.—The contract for building the sewer near the site of the Asylum was awarded to the ANDERSON-JOHNSON CO., at $4,300, by the Asylum Committee.

SUPERIOR, WIS.—The contract for the construction of the sewer from the K. St. sewer along L and Laurelton Aves., has been awarded to the ANDERSON JOHNSON CO., for $6,777.

TWO HARBORS, MINN.—Bids are asked by the City Council until Oct. 7 for the construction of lateral sewers on Second, Third, Eighth and Tenth Aves.

ST. PAUL, MINN.—Plans will be prepared for the construction of a sewer on Goff Ave., between George and Page Sts.

CLOQUET, MINN.—Bids are asked by Joseph Loisee, City Clerk, until noon, Oct. 19, for the construction of a sanitary sewer.

FARGO, N. DAK.—Contracts for three water mains and three sewers were awarded to JAMES KENNEDY and G. W. HAGGERTY.

LINCOLN, NEB.—A combined sewer, about 4,200 ft. in length, with 30-in. and 24-in. vitrified pipe, will soon be built. Estimated cost, $11,000.

HUMBOLDT, NEB.—A sewer system is under consideration. M. N. Blair, City Engr., estimates the cost at $5,000.

KANSAS CITY, MO.—The West Side Council has awarded contract to R. J. & W. A. BOYD for the construction of a sewer two miles long in the western part of the city, at $68,102. The sewer starts at 16th St. and Tauromee Ave., two blocks southwest of Carnival Park, and runs north and east, entering Jersey Creek at Ninth St.

MONETT, MO.—We are officially advised that the contract for constructing sanitary sewer system has been awarded to J. J. DUNNIGAN, Shenandoah, Iowa, at $51,998. Bids were received Sept. 24 as follows: The other bidders were as follows: E. J. Overly & Co., Joplin, Mo., $61,718; McIlroy & Reese, Fayetteville, Ark., $52,490, and Wm. F. Holl, Clinton, Mo., $52,575. Itemized bids will be given next week under Contract Prices. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

TAYLOR, TEX.—Work will soon begin on the proposed sewerage system, which includes the principal streets of the city.

OKLAHOMA CITY, OKLA.—The Blackwelder sewer on Blackwelder Ave. will soon be rebuilt, the old walnut pipe to be replaced with regulation sewer pipe, at an estimated cost of $25,000. W. C. Burke, City Engr.

SEATTLE, WASH.—Bids will be asked soon for construction of the Lake Union District north trunk sewer.

Bids are asked until Oct. 5 by C. B. Bagley, Secy. Bd. Pub. Wks., for constructing sewers on Hiawatha Pl., at estimated cost of $7,000, and on North 39th St., at estimated cost of $33,000.

ELLENSBURG, WASH.—An extensive sewer system probably will be undertaken by this city.

VENICE, CAL. — The MERCEREAU BRIDGE & CONSTRUCTION COMPANY was awarded the contract for the construction of the 240-ft. extension of the sewage wharf, at Center St., for $3,290.

OAKLAND, CAL.—Bids opened by the Board of Public Works on Sept. 18, for the intercepting sewer in Wood St., from Ninth to 22d Sts., were as follows: Atlantic, Gulf & Pacific Co., $45,493; F. H. Dahnke, $55,800; C. D. Vincent, $41,383. F. C. Turner is City Engr.

PASADENA, CAL.—S. J. Van Orman, City Engr., has stated that the proposed outfall sewer for the city's annexed portion will cost about $50,000.

RIVERSIDE, CAL.—Bids are asked until 9 a. m., Oct. 8, by F. A. Jacobs, City Clk., for sidewalking, curbing, concrete guttering and construction of steel and vitrified sewer pipe culverts, on Twelfth St., from Walnut to Pepper Sts.

SANTA CLARA, CAL.—The contract for building a sewer system at Larkspur has been awarded to CONTRACTOR STANLEY, at $30,000.

BISBEE, ARIZ.—Bids are asked until Oct. 5 by C. W. Hicks, City Clk., for the construction of a sewer system.

WHITEROCKS, UTAH.—Bids are asked until Oct. 23 by F. E. Leupp, Comr. Indian Affairs, Washington, D. C., for furnishing material and construction of a sewer system and plumbing for Uintah and Ouray Agency.

TORONTO, ONT.—The Board of Control has awarded the contract for constructing a sewer on Greenwoods Ave. from Queen St. to the Grand Trunk Ry. tracks to the OPEN CONTRACTING CO., for $22,950. Emerson Coatsworth is City Engr.

WINNIPEG, MAN.—Bids are asked until Nov. 15 by Magnus Peterson, Secy. of the Civic Board of Control, for the supply of 15 miles of assorted water pipes. H. N. Ruttan is City Engr.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

BRISTOL, CONN.—The following bids were received by the Selectmen for improving Farmington Ave. at Martin's Hill: Olin J. Benedict, Pittsfield, Mass., $7,738; F. Angora, of Durham, $7,430; F. J. Emmett, of Bristol, $7,257; Pierson Engineering & Construction Co., of Bristol, $6,850; Roger Kennedy, of Middletown, $7,340; Town of Bristol, $7,350.

NEW YORK, N. Y.—The CRANFORD CO., 52 Ninth St., Brooklyn, has secured the contract for regulating and repaving with asphalt on a concrete foundation Skillman St. from Flushing Ave. to DeKalb Ave., at $23,191. Totals of other bids: Uvalde Asphalt Paving Co., 1 Broadway, New York, $23,191; and Barber Asphalt Paving Co., 114 Liberty St., New York, $23,227.

Bids were received on Sept. 18 at the office of Bird S. Coler, Pres. Boro. of Brooklyn, for asphalt paving as follows: Irving Ave.—Lowest bidder, Barber Asphalt Paving Co., 114 Liberty St., New York, $32,827. Totals of other bids: Uvalde Asphalt Co., 1 Broadway, New York, $34,101; and Cranford Co., 52 Ninth St., Brooklyn, $34,023. Roebling St. from South Fourth St. to Union Ave.—Lowest bidder, Uvalde Co., New York, at $73,846. Totals of other bids: Barber Asphalt Co., New York, $75,087; and Cranford Co., Brooklyn, $76,441. Ten Eyck St. from Union Ave. to Bushwick Ave.—Lowest bidder, Uvalde Asphalt Paving Co., New York, at $25,005. Totals of other bids: Barber Asphalt Co., $25,154; and Cranford Co., $25,077.

Bids are asked until 3 p. m., Oct. 10, by the Park Board, Samuel Parsons, Jr., Pres., for furnishing and delivering top soil or garden mould to parks and parkways in the boroughs of Brooklyn and Queens.

Bids are asked until 11 a. m., Oct. 9, by Bird S. Coler, Pres. Boro. Brooklyn, for regulating and repairing the Bedford Ave. roadway from Division Ave. to Heyward St. with asphalt pavement on concrete foundation.

NEW YORK, N. Y.—Bids are asked until 11 a. m., Oct. 16, by Bird S. Coler, Pres. Boro. Brooklyn, for regulating and repaving various streets in the borough.

ALBANY, N. Y.—The following bids were received by the Board of Contract and Supply on Sept. 16, for the improvement and paving of Bradford St.: Mulderry Bros., Albany, Johannesburg Block, $8,449; E. F. Dillon, Albany, Shawmut Block, $9,459; M. F. Dollard, Albany, Catskill Block, $8,741. The contract has been awarded to MULDERRY BROS., for $8,449. The item prices of the lowest bid are: 2,300 sq. yds. brick pavement, $2.02; 125 sq. yds. driveways, $2.20; 10 sq. yds. relaying pavement on concrete foundation, $1.60; 10 sq. yds. relaying pavement on gravel foundation, $1.45; 1,400 lin. ft. straight granite curb, $1.45; 64 lin. ft. circular granite curb, $1.20; 30 lin. ft. relaying curb, 40 cts.; 2,600 sq. ft. flag sidewalk, 20 cts.; 14,200 sq. ft. brick sidewalk, 8 cts.; 3,580 sq. ft. relaying sidewalk, 7 cts.; 30 lin. ft. 6-in. drains, 75 cts.; two water drains, $20; two receiving basins, $85; trench 6-in. main, 40 cts; days to complete, $5 per day, $30. Walter Melius is City Engr.

The HASTINGS PAVING CO. has been awarded the contract for improving the pavement on South Pearl St. for $69 per M. blocks.

SCHENECTADY, N. Y.—The following contracts have been awarded by the Board of Contract and Supply: Grading of Anthony St., to BECKWITH BROS., 119 La Favette St.; paving of Earl Ave. and upper Union St., to T. R. CRANE.

NEWARK, N. J.—The NEWARK PAVING CO. is reported to have been awarded the contract for paving part of Nassau St. with brick, for $8,742.

The contract for paving part of Verona Ave. with granite block is reported to have been awarded to J. ROOSEVELT SHANLEY, for $20,650. M. R. Sherrerd is City Engr.

TRENTON, N. J.—The Common Council, on Sept. 17, is reported to have opened the following bids for paving various streets: Eastern Paving & Construction Co.: Clinton Ave., $2.33, $2.75 and $3; Stockton St., $2.15, $2.75 and $3; Factory St., $2.33, $2.75 and $3 per sq. yd.; prices given on five, ten and 15 years' guarantee respectively.

UNIONTOWN, PA.—Bids are asked by the State Highway Department, Harrisburg, until Oct. 10, for the construction of 5,284 ft. in German Township, Fayette County.

ALLEGHENY, PA.—It is reported that contracts have been awarded for public improvements as follows: HARRY GRAEBING, grading, paving and curbing Nevada St., $2,500; Fraxier St., $4,200; Kennedy Ave., $8,000; Kenwood Ave., $6,000; Warner St. extension, $1,200. H. C. HOWARD, grading, paving and curbing Valley St., $25,000; sewer on Valley St., $6,000; JAMES H. McQUAID, grading, paving and curbing Homer St., $21,000. A. V. PURNELL, grading, paving and curbing Petrel St., $4,100; Tioga St., $4,100; Maryland Ave., $2,000. FRED GWINNER, grading, paving and curbing Woodland Ave., $23,000. THOMAS CRONIN CO., grading, paving and curbing Latrobe Alley, $2,000; Juno Alley, $2,000; Sawmill Alley, $16,000; Oak Alley, $2,100. NELSON & DALY, grading, paving and curbing Yetta Ave., $2,800. John Swan, Dir. Pub. Wks.

GLENBURN, PA.—Bids are asked until Oct. 10 by the State Highway Department, Harrisburg, for the construction of 10,100 ft. of road, to extend from the line of Glenburn Borough and South Arlington Township to the line of Glenburn Borough and Dalton Borough, in Glenburn Borough in Lackawanna County.

TOWANDA, PA.—The contract for road improvements in Troy Borough and Township has been awarded to DALE & GAYNOR, of Scranton, Pa. Bids submitted by Dale & Gaynor were as follows: Troy Borough, using c.-i. pipe as indicated in plans and specifications, $13,783; using corrugated metal culvert pipe, $13,303. Troy Township, around Long's Pond, $7,024; using corrugated culvert pipe, $6,800. Troy Township, toward Alba, $11,767; using corrugated pipe, $11,152. Total of township work, $18,991; with corrugated pipe, $17,952. Total borough and township, $32,574; using corrugated metal culvert pipe, $31,255.

BALTIMORE, MD.—Bids are asked until 11 a. m., Oct. 9, by the City Register for grading, curbing, guttering and paving Yale Ave. from Potter Ave. to the Frederick Road, and Walrad Ave. from Irvington Ave. to Yale Ave.

WASHINGTON, D. C.—The Commissioners of the District of Columbia have awarded the contract for laying cement sidewalks in the District to COLBURN BROS., Washington, at $1.05 per sq. yd. for city sidewalks, and $1.18 for county.

LOUISVILLE, KY.—It is reported that the only bid submitted on Sept. 16 to Board of Public Works for repairing asphalt streets, was that of the American Standard Asphalt Co., at $1.40 per sq. yd. Joseph P. Claybrook is City Engr.

HOPKINSVILLE, KY.—The ORIENTAL CONSTRUCTION CO. has been awarded the contract for the construction of 27 miles of pike, at $48,083.

ZANESVILLE, OHIO.—The following bids for paving Wayne Ave. from Salt Gum Hollow to the corporation line, distance 3,650 ft., were received by the Board of Public Service: T. M. Lynn, $8,972; ADAMS BROS. (awarded contract), $8,084; J. C. Williams, $8,540. E. H. Smith is City Engr.

COLUMBUS, OHIO.—It is reported that the Board of Public Service has awarded the contract for paving Linwood Ave. with asphalt to A. G. PUGH, Dispatch Bldg., for $26,113.

CANTON, OHIO.—We are officially advised that the following bids were received Sept. 3 for paving Navarre St., with (a) Berea stone, (b) Beach City stone, (c) concrete: Harry Carl, Canton, (a) $41,050, (b) $39,858; C. & W. Turnbull, Canton, (a) $40,296, (b) $38,990; Freshwater & Sons, Chester, W. Va., (a) $44,365, (b) $44,576, (c) $43,563; John H. McQuate, Pittsburg, Pa., (a) $49,235, (c) $48,465; Wise, Wise, Smith & Shekels, Canton, (a) $37,770, (b) $37,432; Campbell & Downs, Canton, (a) $42,026, (b) $41,144, (c) $41,001; Balwin Bros. & Graham, (a) $43,040, $42,707.

Contracts for paving Fulton St. from Fourth to Linden Ave., Lincoln Ave., and Charles St., from Market to Cherry Sts., for improving West South St., have been let to WISE, WISE, SMITH & SHEKELS, Canton, at $5,982, $8,482, $9,348 and $7,612 respectively. Contract for improving Harrisburg St. has been let to GEORGE BERGER, Massillon, Ohio, at $6,133. W. E. Sarver is City Engr.

LORAIN, OHIO.—The BARBER ASPHALT CO. has been awarded the contract for paving Vine St. by the Board of Public Service, for $19,858. J. B. Nichols is City Engr.

YOUNGSTOWN, OHIO.—Bids are asked until noon, Oct. 10, by the Board of Public Service for furnishing the labor and materials for grading Falls Ave. from Hillman to Edwards Sts. Y. M. Lillie is City Engr.

DANVILLE, IND.—Bids will soon be asked by the Commissioners of Hendricks County for construction of a gravel road in Marion Township and a gravel road in Clay Township.

LAGRANGE, IND.—Bids are asked until noon, Oct. 7, by V. D. Weaver, Audr., for replacing a walk and building a cement walk on the east side of the public square.

GRAND RAPIDS, MICH.—It is reported that all bids opened Sept. 12 by the Board of Public Works for paving East Bridge St. were rejected as being in excess of the estimated cost, $33,000. New bids may be asked. L. W. Anderson is City Engr.

MACOMB, ILL.—The contract for paving North Lafayette St. from Pierce St. to the north line of the David Van Meter property has ben awarded to WILL R. FROST and GEORGE H. RUSSELL, of Macomb.

ROCK ISLAND, ILL.—The Board of Local Improvements has awarded the contract for construction of cement walks in the Fifth and Sixth Wards to RANSON & ATKINSON, at 15 cts. per sq. ft. and 20 cts. per yd. for excavating.

QUINCY, ILL.—The Board of Local Improvements has awarded the contract for paving North Tenth St. to EBERT & SHANAHAN, for $26,478.

KENOSHA, WIS.—Bids are asked until Oct. 7, by James Orman, City Clk., for grading and paving Grand Ave. with brick.

DES MOINES, IOWA.—It is reported that the following streets will be paved: Grand Ave, West 30th St., with asphalt; creosote block, West Sixth, Seventh and 16th Sts. New bids will be taken for paving West Second St.

The following bids were opened Sept. 19 for paving Park Lane with brick, by the Board of Public Works: J. W. Turner Improvement Co., of Des Moines, $2.19 per sq. yd. (recommended for award); Cook Construction Co., $2.21 per sq. yd.; Jas. Horrabin, $2.23 per sq. yd., and F. W. Hunt, $1.14 per sq. yd.

The W. A. Bryant & Sons Co. submitted the only bid received on Sept. 13 by the Board of Public Works for paving 1,084 sq. yds. on Library Ave. with asphalt, at $2.14 per yd.

DULUTH, MINN.—It is reported that J. A. JOHNSON, 717 East Second St., has been awarded the contract for paving 29th St., at $9,854.

ENID, OKLA.—Bids are asked by E. R. Lee, City Clk., until Oct. 11, for grading, curbing, etc., and construction of 11,500 yds. of asphalt. C. H. Seeton is City Engr.

EL RENO, OKLA.—P. F. CONNELLY, Sioux Falls, S. D., has been awarded the contract for laying 38,913 sq. yds. vitrified brick pavement, with asphalt filler. The pavement will be laid on a 5-in. concrete base.

COLORADO SPRINGS, COLO.—Bids are asked until noon, Oct. 5, by E. C. F. Whitaker, City Clerk, for laying sidewalks.

OLYMPIA, WASH.—Bids are asked until 2 p. m., Oct. 15, by Joseph M. Snow, State Highway Bd. of Washington, for grading and macadamizing State Aid Road No. 2. J. B. Weddell is City Engr.

SEATTLE, WASH.—Bids are asked by C. B. Bagley, Secy. of the Bd. of Pub. Wks., until 10 a. m., Oct. 5, for the following improvements: Grading and curbing Fuhrman Ave. and constructing all necessary bulkheads or retaining walls; estimated cost, $31,200; grading Main St. from Rainier Boulevard to Bateman St., and building wood sidewalks and constructing a plank roadway 24 ft. in width; estimated cost, $6,000; grading Sixth Ave. and constructing concrete sidewalks thereon; estimated cost, $10,800; constructing concrete walks on Irving St., and curbs and gutters; estimated cost, $6,300; paving Union St. with vitrified brick, together with granite curbs and additions to water main and sewer systems as may be necessary; estimated cost, $23,900.

*NAMPA, IDAHO.—Bids are asked until 8 p. m., Oct. 19, for laying and constructing bitulithic pavement upon various streets in Nampa. Claude Duval, City Clerk.

AMHERST, N. S.—The contract for laying 5,600 sq. yds. of bitulithic pavement was awarded to the WARREN BITUMINOUS PAVING CO., Toronto, Ont.

OWEN SOUND, ONT.—The contract for laying 72,000 sq. ft. of cement sidewalks has been awarded to FROST & NICKEL.

CHATHAM, ONT.—The contract for laying 7,900 sq. yds. of pavement has been awarded to the WARREN BITUMINOUS PAVING CO., Toronto, Ont.

ST. BONIFACE, MAN.—An additional contract for 1,400 sq. yds. of bitulithic pavement has been awarded to the BITULITHIC & CONTRACTING CO., Winnipeg, Man.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

RICHFORD, VT.—See under Light and Power Plants.

SPRINGFIELD, MASS.—The Springfield Elevator & Pump Co., of Springfield, has bought a strip of land extending from Windsor St. to the tracks of the Hartford Division of the New York, New Haven & Hartford R. R. The tract is about 200 ft. deep and has a frontage of 320 ft. on the east side of Windsor St. It is the intention of the company, it is stated, to build a factory on the land. Lewis D. Parker is Pres.

BUFFALO, N. Y.—The Buffalo Foundry Co. has taken over the business of the David Bell Engineering Works, Evans and Norton Sts., Buffalo, manufacturers of the David Bell steam hammers, etc., and will hereafter conduct the consolidated business of the two companies under the name of the Buffalo Foundry & Machine Co. A machine shop will be erected by the Buffalo Foundry & Machine Co. adjoining its present foundry at East Ferry St., Fillmore Ave. and the New York Central Belt Line. Henry D. Miles is Pres. and Michael Sullivan, Vice-Pres. David Bell is Supt. Shop Dept.

Work will begin at once on the proposed plant of the Auto-Car Equipment Co. in Elwood Ave. between Hertel and Kenmore Aves. The company now has under consideration the question of power plant equipment. The company has decided to erect a building 80 × 100 ft., two stories, with a wing 80 ft. square, to be constructed of brick and steel and to have cement floors. The plans provide for another building of similar size to be erected early next season.

NEW YORK, N. Y.—Arthur R. Koch, 26 Court St., Brooklyn, has let contracts to CHRISTIAN SCHNEIDER, Debevoise Pl., Brooklyn, for erecting a 4-story factory and loft building for John Uretz. Cost, $25,000.

NIAGARA FALLS, N. Y.—The Niagara Pulp Board Co. is reported to have applied to the Board of Public Works for a permit to erect a plant on Third St., to cost about $57,000. Charles B. Gaskill is reported to be interested.

NEW CASTLE, PA.—The New Castle Automobile Co., recently formed by Daniel Morgan, of Pittsburg, Pa., and a number of local parties, will build a plant for the manufacture of 6-cylinder automobiles. The company will apply for a charter in a few weeks, and the construction of the plant will be started this year. When completed, 200 men will be employed. No equipment has been purchased for the building, which will be 60 × 160 ft.

PHILADELPHIA, PA.—WILLIAM STEELE & SONS, 1600 Arch St., Philadelphia, has been granted a permit to erect for the Horn & Hardart Baking Co., 818 Chestnut St., a 2-story building at 202-210 South Tenth St. The building will measure 109.11 × 185.5 ft., and will be fireproof throughout, the materials of construction being reinforced concrete and brick. It will have a baking plant, restaurant and offices, besides rooms and a roof garden for employees. The cost will be $98,000. F. Russell Stuckert, 1421 Chestnut St., is Arch.

Permit has been granted to WILLIAM STEELE & SONS, 1600 Arch St., to erect a $240,000 bread-baking plant for the Freihofer Vienna Baking Co., Master and 23d Sts., on the plot of ground extending from Indiana Ave. to Clearfield St., and from 19th to 20th Sts. The plant will include a 2-story and basement brick and concrete warehouse, measuring 93 × 288 ft., situated on the south side of Clearfield St., east of 20th St.; a 1-story brick boiler and engine house, 102 × 69.1 ft., on the corner of 20th and Clearfield Sts.; a 1-story brick bakery building, 136.6 × 296.6 ft., on the corner of 19th and Clearfield Sts., and a stone cold storage plant, 55 × 155 ft., underground, on the south side of Clearfield St., east of 20th St.

BALTIMORE, MD.—The National Hydraulic Stone Co., manufacturers of concrete blocks, Builders' Exchange Bldg., 2 Lexington St., will erect new concrete-block plant, it is stated, at corner Fourth St. and Clifton Ave, Walbrook, a suburb of Baltimore.

ROANOKE, VA.—The Roanoke Enameling & Stamping Co. will soon let contracts for erecting its plant, it is reported.

PARKERSBURG, W. VA.—It is stated that the Travis Glass Co. will establish plant for the manufacture of glass bottles and milk jars with a capacity of ten cars per week. A structural steel building, 60 × 30 ft. and 16 ft. high, may be erected. H. E. Travis is Mgr., principal address, Mannington, W. Va.

HUNTINGTON, W. VA.—The Walters Timber Co., recently incorporated with $50,000 capital stock, will install two stave mills and two mills for cutting quarter lumber and cross-ties, for handling lumber on dinkies. Ten miles of narrow-gage road will be constructed. W. L. Walters, Whitehouse, Ky., is Mgr.

STONY POINT, N. C.—The Stony Point Mfg. Co. has awarded contract to J. L. RUSSELL, of Statesville, N. C., and W. G.

HARRIS, of Stony Point, for construction of mill building, 77 × 224 ft., one story high, for cotton factory. About 4,000 spindles will be installed. M. K. Steele is Pres.

YOUNGSVILLE, N. C.—J. T. Wilson has awarded contract to M. F. HOUCK, Louisville, N. C., for erection of drying-house in Youngsville.

DOWLING PARK, FLA.—The Dowling Lumber Co. will rebuild sawmill recently reported burned, it is stated. The building will be 80 × 380 ft., and will cost $15,000; cost of machinery to be installed, $50,000. T. B. Dowling is Engr.; R. L. Dowling is Gen. Mgr.

VANDORN, ALA.—A syndicate has purchased 40,000 acres of land at Vandorn. A cement plant is to be built on the land by a firm to be known as the Van Dorn Portland Cement Co., which has been chartered under the laws of Louisiana, with a capital stock of $1,250,000. The officers are: J. L. Means, Pres., and J. W. Bayersdorffer, Treas.

GADSDEN, ALA.—H. E. Warrington, Cincinnati, Ohio, Ch. Engr., Alabama Great Southern R. R. Co., has approved plans and specifications for erection of 100-foot addition to woodworking plant of Gadsden Car Works, which will be equipped with improved woodworking machinery.

MONTGOMERY, ALA.—Southern Paper Co., Atlanta, Ga., contemplates establishing 20-ton plant in Montgomery, capitalized at $100,000, to manufacture paper from the stalks and unopened bolls of the cotton plant. H. Croll, Kiser Bldg., Atlanta, Ga., is interested.

MOBILE, ALA.—The Mobile Fish & Oyster Co. will erect an ice and cold storage plant here, it is reported, to cost about $40,000.

CHALMETTE, LA.—We are officially advised that the McCLINTIC-MARSHALL CONSTRUCTION CO., Park Bldg., Pittsburg, Pa., has the contract for steel work in connection with construction of sugar refining plant to be built at Chalmette for the American Sugar Refining Co., 117 Wall St., New York, N. Y. Eugene Kell, 132 North Peter St., New Orleans, La., is Arch.

PADUCAH, KY.—The Paducah Brewery Co. has awarded contract to GEORGE KATTERJOHN for stone and brick work on proposed ice and refrigerating plant. Plant will have daily capacity of 150 tons and cost about $60,000.

MANSFIELD, OHIO.—Bids are asked until Oct. 16, by the Board of Managers, Ohio State Reformatory, for installing an ice-making and refrigerating plant of from ten to twelve tons capacity. Jacob Reinhardt is Steward of the reformatory; Fred S. Marquis is Secy. Bd. Mgrs.

MARQUETTE, MICH.—The Lake Shore Engine Works, C. E. Van Iderstine, Supt., has plans for the following buildings: Foundry, one story, 40 × 130 ft., brick and steel; power-house, two stories, 32 × 60 ft., brick; machine shop, two and three stories, 80 × 240 and 80 × 260 ft., brick and steel; storage building, three stories, 32 × 160 ft., brick; smith shop, two stories, 40 × 60 ft., brick; office building, two stories, 50 × 100 ft., press brick.

DETROIT, MICH.—Pollmar & Ropes, Archs., Cleland Bldg., Detroit, have completed plans and let contracts for an addition to the plant of the Gordon & Pagel Bread Co., two stories high, of solid brick, 58 × 100 ft., exterior of paving brick with cut-stone trimmings. The interior will be of steel construction with mill floors. The addition will also contain new offices for the company, finished in hardwoods with tile floors. The mason work contract has been let to GEORGE D. NUTT; carpenter work to JOSEPH GOEDDEKE; steel work, H. B. LEWIS; roofing, VOIGT & SEXAUER; plumbing, FISCHER & KAYSER; glazing, PITTSBURG PLATE GLASS CO., Floreffe, Pittsburg; plastering, G. JAHNKE; electric work MILLER-SHELDON ELECTRIC CO., 208 Griswold St.

SUPERIOR, WIS.—SCHMIDT BROS. & HILL have the general contract for a foundry and machine shop here, for the Great Northern Ry. Co. Cost, $80,000. A. H. Hogeland, St. Paul, Minn., is Ch. Engr.

DES MOINES, IA.—The JOSEPH SCHNEIBLE CO., 122 Monroe St., Chicago, Ill., has the general contract for the construction of a brewery at Des Moines for the Des Moines Brewing Co. It will comprise several buildings, the main buildings to be of fireproof construction, and will cost $150,000. The contracts for lumber and concrete are yet to be let.

WESTON, MO.—Virgil H. Elliston, County Surv., it is stated, has completed surveys for the plant of the Missouri Portland Cement Co., of Kansas City. This company purposes establishing a cement plant about four miles north of Weston on the lines of the Rock Island and Burlington railroads, with a daily capacity of 1,000 bbls. T. J. Benkendorf, 919 Ridenbaugh St., Kansas City, Mo., is Pres.; H. W. McNutt, of St. Joseph, Mo., Secy. and Treas. Freeborn Engineering & Construction Co., Heist Bldg., Kansas City, Mo., are Consult. Engrs.

ST. LOUIS, MO.—G. T. Norton is preparing plans for a boiler-house for the William J. Lemp Brewing Co., 13th & Cherokee Sts. Cost, $200,000.

SMITHVILLE, TEX.—The Missouri, Kansas & Texas Ry. Co., J. W. Petheram, Ch. Engr., Dallas, Tex., will have plans prepared for erection of car building and other shops, round-houses, etc.

HILLSBORO, TEX.—It is reported that the sum of $75,000 is to be expended at once by Directors of the Hillsboro Cotton Mill Co. in enlarging the main building and making needed improvements.

PUEBLO, COLO.—George Roe, Arch., Grand Opera House Block, Pueblo, is reported to be preparing plans for improvements and additions to Walter Brewery, which will cost about $25,000.

RODEO, CAL.—The Great Western Smelting & Refining Co., corner of Spear and Folsom Sts., San Francisco, will erect a rolling mill at Rodeo, 30 miles north of San Francisco. It will be located on a 33-acre tract, with good water and rail shipping facilities, and will have a capacity of 50 tons per day.

SAN DIEGO, CAL.—Plans are reported to have been completed for a laundry building to be erected by Nelson Snyder, of the Electric Laundry Co., on I and 15th Sts. It will be 100 × 140 ft., one story high and of pressed brick. Cost, about $50,000.

SPIRIT LAKE, IDAHO.—The Idaho & Washington Northern R. R. Co., Coeur d'Alene, Idaho, will build shops and a round-house at Spirit Lake, it is reported, to cost about $100,000. Plans for the buildings have not yet been completed.

PORT ARTHUR, ONT.—The Kennedy Carbon Light Co. has purchased a site in Port Arthur and will erect a plant for the manufacture of gasoline lamps, heaters, etc.

DAUPHIN, MAN.—S. BROWN, Winnipeg, Man., has been awarded the contract for the construction of the round-house at Dauphin, Man., for the Canadian Northern Ry. Co. The contract price is about $45,000. A. Shields, Winnipeg, is Master Mechanic; T. Emerson, Dauphin, is Superv. Bridges and Bldgs.

BRANDON, MAN.—The SHARP CONSTRUCTION CO., Winnipeg, Man., has been awarded the contract for the construction of the new round-house for the Canadian Northern Ry. Co., at Brandon. A. Shields, Winnipeg, Man., is Master Mechanic.

VANCOUVER, B. C.—The city of Vancouver will install a new creosoting plant, it is reported, for the treatment of wood blocks to be used in street paving.

MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

*STEEL HULL.—Louisville, Ky.—Bids are asked until noon, Nov. 4, by Capt. H. Burgess, Corps Engrs., U. S. A., for steel hull for snagboat.

DAM.—Latchford, Ont.—Bids are asked by Fred. Gelinas, Secy. Dept. Pub. Wks., Ottawa, Ont., until Oct. 10, for construction of dam across the Montreal River at Latchford.

DREDGING.—Seattle, Wash.—No bids were received on Sept. 18 by Maj. H. M. Chittenden, Corps Engrs., U. S. A., for dredging Pend d'Oreille River, Wash.

DREDGING.—Wilmington, Del.—Bids are asked by Maj. C. A. F. Flagler, Corps Engrs., U. S. A., until Oct. 21 for dredging new entrance to Broadkill River, Del.

*DREDGING.—Providence, R. I.—Bids are asked until 11 a. m., Oct. 30, by Lieut-Col. J. H. Willard, Corps Engrs., U. S. A., for dredging in Providence Harbor, R. I.

CANAL.—Centerville Station, Ill.—Bids are asked by the Centerville Station Board until Oct. 5 for constructing ditch to drain Pittsburg Lake. Estimated cost, $150,000.

TUNNEL.—Providence, R. I.—The Common Council on Sept. 16 adopted a resolution to construct a tunnel from North Main to Thayer St., under College Hill and to south of the north line to Waterman St.

DITCHES.—Thief River Falls, Minn.—ARPIN BROS., of Thief River Falls, have secured a contract for building Drainage Ditches 47 in Marshall County and 48, 49 and 50 in Kittson County, at about $30,000.

LAUNCH.—Washington, D. C.—The Revenue-Cutter Service, Washington, has awarded to the ELECTRIC LAUNCH CO., of Bayonne, N. J., contract for furnishing one 70-ft. twin-screw gasoline launch, at $19,616.

WHARF.—Lion's Head, Ont.—Bids are asked until Oct. 18 by Fred Gelinas, Secy., Dept. Pub. Wks., Ottawa, for constructing an extension to the wharf at Lion's Head. J. G. Sing is Res. Engr., Confederation Life Bldg., Toronto.

GUN CARRIAGES.—Washington, D. C.—The Chief of Army Ordnance, Washington, has awarded to the BETHLEHEM STEEL CO., South Bethlehem, Pa., contract for furnishing two 12-in. disappearing gun carriages, l. f., model 1901, at $48,867.

QUAY WALL.—Bremerton, Wash.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., has awarded to TIMOTHY RYAN, Seattle, Wash., contract for the construction of a concrete quay wall at the Navy Yard, Puget Sound, Wash.

*SIGNAL SYSTEM.—New York, N. Y.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Oct. 24, for installing a flash-light signal system for elevators in the U. S. Custom House.

DREDGING.—Boston, Mass.—The Bay State Dredging Co., 19 High St., Boston, submitted a bid of 49½ cts. a cu. yd. for dredging about 13,000 cu. yds. in Mystic River, Mass. Maj. Edmond Burr, Corps. Engrs., U. S. A. A. E. Hatch is Mgr., Bay State Dredging Co.

BOUNDARY WALL.—New York, N. Y.—Bids are asked until 3 p. m., Oct. 17, by the Park Board, for furnishing all the labor and materials necessary to construct a rustic masonry boundary wall around Sunset Park, Boro. of Brooklyn. Samuel Parsons is Pres.

ROCK.—Vicksburg, Miss.—The contract for furnishing about 15,000 tons rock along Mississippi River has been recommended for award to Guy Dickinson, of Little Rock, Ark., at $1 per ton on cars at Little Rock. Capt. G. M. Hoffman, Corps Engrs., U. S. A., New Orleans.

ORDNANCE.—Washington, D. C.—Bids were received as follows Sept. 24 at the Bureau of Army Ordnance, Washington, for furnishing 334 caps for projectiles to be of cast-iron or steel: Tredegar Co., Richmond, Va., $5 each. Richmond Iron Works, Richmond, Va., $6.30 each.

*LIMESTONE.—Washington, D. C.—Bids are asked until 2 p. m., Oct. 24, by Bernard R. Green, Supt. Const., National Museum, for furnishing, delivering and setting in place complete the cut buff Bedford limestone and marble column shafts and marble bases required for screens in rotunda in new building for National Museum.

LEVEE.—New Orleans, La.—Bids were received on Sept. 20 by Capt. J. F. McIndoe, Corps Engrs., U. S. A., for constructing the Burton to Louderbough levee, about 25,000 cu. yds., in the Lake Borgne Levee Dist. Bid of M. Cullen, of Fort St. Philip, La., at 23½ cts. a cu. yd., was recommended for acceptance. Estimated cost, $5,875.

W. B. BORNE has the contract for enlarging and revetting the levee in the Fifth District, Algiers (bids opened by the Levee Board on Sept. 11), at $61.75 per M. ft., for creosoted lumber, and 43 cts. per cu. yd. for earthwork in place, and $45.50 per M. ft. for cypress lumber. Noted on Sept. 12.

At a meeting of the New Orleans Levee Board on Sept. 19 it was decided to secure bids for building levees in the Third District, one from Louisa to Desire St., at a cost of about $40,000, and the other from Mazant to Poland St., to cost about $75,000. The engineer also recommended that arrangements be made for filling all low places along the commercial front at a cost of about $25,000.

Contract for constructing the new Couret Pl. levee has been awarded to A. B. CALBRIAC, at $25,000.

FENCES, ENTRANCES.—New York, N. Y.—Bids are asked until 3 p. m., Oct. 17, by the Park Board, for repairs and alterations to and painting of fences around and on parkways in Boros. of Brooklyn and Queens. Also for repairs and alterations to various ornamental stone entrances to Prospect Park, Boro. of Brooklyn. Samuel Parsons, Jr., is Pres. Bd.

DREDGING.—Washington, D. C.—The Army Engineers' Office, Washington, D. C., hase made the following awards for dredging in Virginia waterways: MINER ENGINEERING CO., Norfolk, Va., 100,000 cu. yds. in Occoquan Creek, 16 cts. per cu. yd.; 20,000 cu. yds. in Urbana Creek, 22 cts.; 28,000 cu. yds. in Carter's Creek, 27 cts.; 10,000 cu. yds. in Mattaponi River, 35 cts.

BOILERS, PUMPS.—New York, N. Y.—Bids are asked until 11 a. m., Oct. 10, by Louis F. Haffen, Pres. Boro. of the Bronx, for furnishing 40-HP. boilers and pumps with necessary fittings, and operating the same to remove the water therefrom at the Inwood Ave. storm relief tunnel sewer, and at Shaft No. 2 continually 24 hours per day, and at the westerly end of the High Bridge cut for eight hours per day.

DREDGING.—Saginaw, Mich.—Bids were received on Sept. 23 by the Board of Park and Cemetery Commissioners for dredging and excavating Rust Lake channel, connecting same with Saginaw River, Wright Bayou and river front, and filling the Rust Park property complete; approximate quantity to be excavated is about 600,000 cu. yds. Contract was awarded to H. W. HUBBEL & CO., of Saginaw, at $96,525. David C. Bell, Clk.

GRANDSTAND.—Astoria, L. I., N. Y.—The following are the bids received on Sept. 23 by C. B. J. Snyder, Supt. School Bldgs., Bd. Education, New York, for the general construction, etc., of a grandstand, to be placed on Athletic field at Munson and Orchard Sts., and the East River, Astoria, Boro. of Queens: William Werner, $32,990; J. & L. Moreland Co., $32,382, and LAURENCE J. RICE, 5 East 42d St., New York City, $31,475 (awarded contract).

BARGE CANAL.—Albany, N. Y.—The Canal Board on Sept. 26, approved the plans and specifications, presented by Frederick Skene, State Engr. and Surv., for Barge Canal Contract No. 9. The work is for improving the present canal from a point .164 miles east of Eagle Harbor bridge to a point .09 miles west of Beal's bridge, Orleans County. Length of contract, 5.682 miles. The Engineer's estimate is $724,000. It is expected that bids will be asked on this contract later this fall.

*DREDGING.—New Orleans, La.—Bids were received on Sept. 10 by Capt. J. F. McIndoe, Corps Engrs., U. S. A., for dredging in Southwest Pass, Mississippi River, and that of the BOWERS SOUTHERN DREDGING CO., of which R. P. Clark, of Galveston, is Pres., was the lowest and was awarded the contract at 14 cts. a cu. yd.; total, $475,000. This bid provides for the completion of the work within 200 days. Other bidders were: The North American Dredging Co., of New Orleans, $557,320, 16 months; John Anderson, Gulfport, $479,208, 14 months; the Atlantic, Gulf & Pacific Co., of New York, $543,360, 20 months.

PIER.—New York, N. Y.—The following bids were received Sept. 27, by J. A. Bensel, Comr. Docks and Ferries, for building an extension to pier between 51st and 52d Sts., Boro. of Brooklyn: Butler Bros. & Hoff Co., 1170 Broadway, $19,100; John D. Walsh, 100th St., $18,997; General Contracting & Engineering Co., 17 State St., $20,527; William H. Jenks, 61 Pearl St., $19,223; Bart. S. Cronin, 573 Clinton st, Brooklyn, $18,870; Phoenix Construction Co., 13-21 Park Row, $19,897; Bernard Rolf, 39 Cortlandt St., $20,663; George B. Spearin, 4 Navy Yard, Brooklyn, $20,332; New York State Construction Co., 80 Broad St., $17,303.

SUBMARINE CABLES.—New York, N. Y.—The bids received by Frederick H. Shroeder, Pres. Comrs. of Quarantine, 62 William St., New York, on Sept. 20th, for installing submarine telephone cables between Staten Island and Hoffman Island and between Hoffman Island and Swinburne Island were: Western Electric Company, New York, (1) $6,695; (2) $6,065. J. Livingston, Jr., $16,000. The second bid of the Western Electric Co. was made subject to the condition that the clause in the specifications specifying electrostatic capacity should be entirely waived. Contract was awarded to the WESTERN ELECTRIC COMPANY, New York, for $6,695.

CANAL.—New Orleans, La.—Bids are asked by James S. Brady, Chn., and W. J. Cune, Secy., Lafourche Levee Districts, New Orleans, La., until noon, Oct. 22, in office of Board of State Engineers, Cotton Exchange Building, New Orleans, La., for construction of the Cancienne canal in Assumption parish. Length of line, about 8,500 ft.; amount of excavation, about 250,000 cu. yds.

U. S. POSSESSIONS AND CUBA.

STEAM SHOVELS.—Panama.—Bids were received as follows Sept. 25 at the Isthmian Canal Commission, Washington, D. C., for furnishing twelve steam shovels, type B, dipper capacity five cubic yards: Bucyrus Co., South Milwaukee, Wis., $163,500, 167 days; Marion Steam Shovel Co., Marion, Ohio, $158,100, 150 days; Vulcan Iron Works, Toledo, Ohio, $196,464, 240 days.

CHURN DRILLS.—Panama.—Bids were received as follows Sept. 25, at the Isthmian Canal Commission, Washington, D. C., for furnishing 30 steam churn drills and parts: American Well Works, Aurora, Ill., $25,693 and $25,986, 120 days; Austin Mfg. Co., 307 Dearborn St., Chicago, $22,841, 120 days; Fox Bros. & Co., 126 Lafayette St., New York, $33,005, 160 days; Keystone Driller Co., Beaver Falls, Pa., $21,291, 70 days; Manning, Maxwell & Moore, 85 Liberty St., New York, $22,699; Sparta Iron Works, Sparta, Wis., $22,400, 150 days; Star Drilling Machine Co., Akron, Ohio, $23,565, 120 days; Christman Co., Massillon, Ohio, $21,061, 75 days.

AIR COMPRESSORS, ETC.—Panama.—Bids were received Sept. 25 at the Isthmian Canal Commission, Washington, for (a) two cross compound steam condensing and cross compound air compressor, and (b) 50 rock drills and equipment: Chicago Pneumatic Tool Co., 95 Liberty St., New York, (a) $22,380, 105 days, (b) $14,766, 90 days; Ingersoll-Rand Co., 11 Broadway, New York, (a) $27,806, $26,962, $29,728, (b) $16,146, 60 days; Sullivan Machinery Co., Railway Exchange Bldg., Chicago, (a) $28,090, 105 days, (b) $15,280, 90 days; Laidlaw-Dunn-Gordon Co., 114 Liberty St., New York, (a) $18,106, $18,788, 180 days; Wisconsin Engine Co., Corliss, Wis., $32,072, 120 days; Baird Machinery Co., Pittsburg, $30,000, gasoline; Fox Bros. Co., 126 Lafayette St., New York, (b) $16,466.

TRACK SUPPLIES.—Panama.—Bids were received as follows Sept. 25 at the Isthmian Canal Commission, Washington, D. C., for (a) 4,825 gross tons 70-lb. steel rails, (b) 29,700 steel splice bars, (c) 560,000 lbs. track spikes: Bethlehem Steel Co., South Bethlehem, Pa., (a) $205,052; R. C. Hoffman Co., Baltimore, (a) $149,575, $150,781, $153,194, (b) $10,631, (c) $12,432; J. B. Kendall, Washington, (c) $12,544; Lackwanna Steel Co., 62 Rector St., New York, (a) $158,200, (b) $12,682; Southern Exporting Co., New Orleans, (c) $16,352; Stauffer, Eshleman & Co., 511 Canal St., New Orleans, (c) $13,720; U. S. Steel Products Exports Co., 24 State St., New York, (a) $155,606, (b) $12,660, (c) $12,488; Motley, Green & Co., 66 Broad St., New York, (c) $13,160; Excelsior Equipment Co., Pittsburg, $13,067.

STEEL BARGES.—Panama.—Bids were opened Sept. 28 at the office of Col. H. F. Hodges, Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for furnishing twelve steel barges, (a) delivered complete at Colon, (b) delivered knocked down and securely packed at Colon: Fore River Shipbuilding Co., Quincy, Mass., (b) $395,000, 365 days; Samuel Holmes, New York, two barges on bidders' specifications, (a) $35,000, ready for delivery Dec. 1, on Delaware River; Motley, Green & Co., 66 Broad St., New York, (b) $342,000, 120 to 480 days; Newport News Shipbuilding & Drydock Co., 1 Broadway, New York, (b) $276,000, 213 to 274 days; Port Huron Construction Co., Port Huron, Mich., (b) $486,000, 162 to 517 days; Pusey & Jones Co., Wilmington, Del., (b) $349,284, 104 to 317 days; Maryland Steel Co., of Baltimore, Sparrows Point, Md., (a) $388,000, 180 to 300 days shipment, (b) $306,000, 270 days' shipment; New York Shipbuilding Co., Camden, N. J., (a) $345,000, delivered Camden, 180 to 365 days, (b) $352,000, 365 days.

(No supplementary bids have been received by the Isthmian Canal Commission for steel barges, bids for which were received on Sept. 28.)

LUMBER.—Panama.—Bids were received Sept. 25 at the Isthmian Canal Commission, Washington, D. C., for lumber as follows: (a) 105,000 cross-ties; (b) 10,000 cross-ties; (c) 105 sets switch ties; (d) 4,000 untreated piles; (e) bridge timber. American Tie & Timber Co., 11 Broadway, New York, (a) $109,725, $120,175, $107,525, $108,100, $114,425, $86,825, $107,525, (b) $10,100; A. S. Bacon & Sons, 2 Bay St., West, Savannah, Ga., (a) $106,050, $99,750, (b) $10,100, $9,500, (c) $7,640, (d) $30,500, (e) $30,480; Continental Lumber & Tie Co., Houston, Tex., (d) $50,100, (e) $32,748; William P. Cooke & Co., 100 Wall St., New York, (a) $99,225, $97,125; G. Elias & Bros., Buffalo, (b) $14,200, (c) $8,595, (d) $37,110, (e) $29,768; Arthur Gamwell, Seattle, Wash., (a) $115,227, (b) $10,974, (c) $7,065, (d) $42,600, (e) $25,956; E. J. Gex, Bay St., Louis, Miss., (d) $36,720; William D. Gill & Sons, 701 President St., Baltimore, (a) $182,700, (b) $17,400, (c) $9,127, (d) $34,100, (e) $30,578; Long Bell Lumber Co., Kansas City, Mo., (d) $15,543; S. E. Naylor & Co., Gulfport, Miss., (b) $11,000, (d) $27,360; Nichols Bros., 74 Cortlandt St., New York, (d) $35,810; J. A. Rennolds & Co., 66 Broad St., New York, (d) $35,837; Salmen Brick & Lumber Co., New Orleans, (d) $27,540; Shipman & Costello, Mobile, (a) $91,250, (b) $8,700, (c) $6,281, (e) $25,969; Robt. R. Sizer & Co., Jacksonville, Fla., (d) $26,220, (e) $32,240; Southern Sawmill Co., New Orleans, (a) $112,350, (b) $10,700, (e) $28,424; M. B. Spottswood, Biloxi, Miss. (Gulfport, Miss., delivery), (d) $12,632; St. Paul & Tacoma Lumber Co., Tacoma, Wash. (Tacoma delivery), (a) $78,850, (b) $7,500, (c) $4,375, (d), $16,256; L. J. Merriman, Wilmington, N. C., (a) $102,742, (b) $9,750, (c) $7,876, (d) $25,500; G. S. Baxter & Co., 15 William St., New York, (a) $104,475, $97,125, (b) $9,950, $9,250, (c) $7,681, $10,328, $7,204, $9,850, (e) $38,278, $36,504; J. K. Joice, 164 Dearborn St., Chicago, (a) $99,750, (b) $9,500; D. L. Gillespie, Pittsburg, (d) $28,975, (e) $29,406.

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

*SANITARY SEWERS.—South Orange, N. J.—Bids, in detail, were received as follows by the Township Committee on Sept. 17 for constructing two sections of sanitary sewers in the Maplewood District and in the South Orange Heights District. Edward A. Arcularius is Township Clk. Alexander Potter, 143 Liberty St., New York, is Consult. Engr. The bidders were: (A) JAMES J. FUSCO, Montclair, N. J. (awarded contract for Maplewood Dist.); (B) Charles Ippolito, Orange, N. J.; (C) Steele & Bave, Owego, N. Y.; (D) Eveline Bros., New Britain, Conn.; (E) PASQUALE CESTONE, Montclair, N. J. (awarded contract for South Orange Heights Dist.); (F) John Driscoll, Orange, N. J.; (G) R. M. Rosser, Kingston, Pa.; (H) James A. Christie, Newark, N. J.:

Maplewood District:	(A)	(B)	(C)	(D)
151 ft. of 10″ vit. pipe sewer, 0′ to 6′ deep..	$0.77	$0.75	$0.68	$0.55
1,775 ft. of 10″ vit. pipe sewer, 6′ to 8′ deep..	.82	.82	.74	.79
911 ft. of 10″ vit. pipe sewer, 8′ to 10′ deep..	.87	.90	.97	1.15
350 ft. of 10″ vit. pipe sewer, 10′ to 12′ deep..	1.00	1.05	1.33	1.49
225 ft. of 10″ vit. pipe sewer, 12′ to 14′ deep..	1.27	1.50	1.72	1.90
48 ft. of 10″ cast-iron pipe sewer.....	1.29	2.00	2.00	3.75
1,367 ft. of 8″ vit. pipe sewer, 0′ to 6′ deep..	.55	.59	.58	.53
8,139 ft. of 8″ vit. pipe sewer, 6′ to 8′ deep..	.59	.65	.67	.66
2,672 ft. of 8″ vit. pipe sewer, 8′ to 10′ deep..	.67	.87	.90	.80
1,990 ft. of 8″ vit. pipe sewer, 10′ to 12′ deep..	.77	1.15	1.15	1.25
675 ft. of 8″ vit. pipe sewer, 12′ to 14′ deep..	1.00	1.50	1.60	1.75
135 ft. of 8″ vit. pipe sewer, 14′ to 18′ deep..	1.37	2.25	1.90	2.25
100 ft. of 8″ vit. pipe sewer, 18′ to 22′ deep..	2.00	2.50	2.50	3.00
12 ft. of 8″ cast-iron pipe sewer.....	1.15	2.00	1.50	3.00
63 manholes, 10′ deep or less.....	52.00	46.00	44.00	60.00
23 ft. of manholes over 10′ deep, per ft.....	10.00	3.00	4.00	7.00
40 ft. of drop manholes, per ft.....	12.00	4.00	5.00	1.90
12 flush tanks, complete, each.....	125.00	90.00	70.00	100.00
40 branches on 10″ pipe, each.....	1.00	.85	.80	.95
300 branches on 8″ pipe, each.....	.77	.75	.60	.85
40 ft. of deep-cut connections, per ft.....	.57	1.00	.40	.70
100 cu. yds. concrete, per cu. yd.....	7.00	5.25	7.50	7.00
500 lin. ft. of timber cradle.....	.50	.30	.40	3.00
1,000 ft. of 4″ vit. pipe sewer, 0′ to 6′ deep....	.42	.35	.45	.29
1,200 ft. of 4″ vit. pipe sewer, 6′ to 8′ deep....	.47	.45	.49	.45
400 ft. of 4″ vit. pipe sewer, 8′ to 10′ deep....	.57	.55	.68	.60
500 ft. of 6″ vit. pipe underdrain.....	1.00	.20	.50	.40
Total	$21,614	$21,881	$22,334	$25,232

South Orange Heights District:	(E)	(A)	(F)	(C)	(B)	(D)	(G)	(H)
152 ft. of 10″ vit. pipe sewer, 8′ to 10′ deep....	$0.77	$0.90	$0.84	$0.95	$0.92	$1.17	$0.90	$1.20
50 ft. of 10″ vit. pipe sewer, 10′ to 12′ deep....	.87	1.17	1.00	1.30	1.07	1.70	1.10	1.35
48 ft. of 10″ cast-iron pipe sewer.....	2.77	1.37	1.62	2.50	2.00	3.50	1.00	3.00
858 ft. of 8″ vit. pipe sewer, 0′ to 6′ deep.....	.57	.57	.55	.56	.59	.55	.60	.95
8,300 ft. of 8″ vit. pipe sewer, 6′ to 8′ deep.....	.67	.65	.65	.64	.68	.62	.75	1.00
5,961 ft. of 8″ vit. pipe sewer, 8′ to 10′ deep.....	.77	.69	.89	.88	.92	.90	.90	1.15
1,300 ft. of 8″ vit. pipe sewer, 10′ to 12′ deep.....	.77	.82	1.12	1.15	1.15	1.15	1.05	1.30
121 ft. of 8″ vit. pipe sewer, 12′ to 14′ deep.....	.97	1.27	1.20	1.60	1.50	1.40	1.40	1.60
48 ft. of 8″ cast-iron pipe sewer.....	2.27	1.67	1.50	1.50	2.00	3.50	1.00	2.75
47 manholes, 10′ deep or less.....	44.00	57.00	46.00	44.00	47.00	60.00	60.00	53.00
10 ft. of manholes over 10′ deep, per ft.....	4.77	5.00	4.00	4.00	4.00	7.00	5.00	5.00
11 ft. of drop manholes, per ft.....	1.97	6.00	2.00	5.00	5.00	1.50	9.00	4.00
13 flush tanks, complete, each.....	100.00	127.00	94.00	70.00	95.00	100.00	95.00	137.00
300 branches on 8″ pipe, each.....	.77	.78	1.00	.60	1.00	.90	.50	1.00
20 ft. of deep-cut connections, per ft.....	.30	.47	1.00	.40	1.00	.70	.50	1.00
100 cu. yds. concrete, per cu. yd.....	5.57	2.87	5.00	7.50	5.25	7.00	8.00	9.00
500 lin. ft. of timber cradle.....	.20	.37	.30	.40	.35	3.00	1.00	1.00
800 ft. 4-in. vit. pipe sewer, 0′ to 6′ deep.....	.37	.42	.25	.45	.35	.33	.40	.45
1,100 ft. of 4″ vit. pipe sewer, 6′ to 8′ deep.....	.37	.47	.30	.50	.45	.44	.50	.50
300 ft. of 4″ vit. pipe sewer, 8′ to 10′ deep.....	.37	.52	.40	.67	.55	.66	.60	.55
500 ft. of 6″ vit. pipe underdrain.....	.30	.47	.50	.55	.50	.39	.50	.45
Total	$17,496	$18,002	$18,456	$18,764	$19,486	$21,115	$22,215	$25,796

THE VIRGINIA BRIDGE & IRON CO., Roanoke, Va., reports that the contracting office of the company, heretofore located at Little Rock, Ark., has been transferred to New Orleans, La. The office will be in charge of F. E. Golian, civil engineer, who has been connected with the engineering department of the company for some time, but more recently with the Atlanta office.

THE J. R. ALSING CO., 136 Liberty St., New York City, is issuing a blue-print sheet showing by computations the power saving in a tube-mill supported on its system, of anti-friction wheels and friction drive as compared with a mill supported on gudgeons and driven by gearing. The computation shows about 50 HP. required for the mill on gudgeons as compared with less than 16 HP. for the Alsing mill.

READERS' WANTS

If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.

Also ask for our BUYERS' GUIDE

STEAM SHOVEL.—San Antonio, Tex.—M. J. Vought, 10 Blum St., San Antonio, Tex., writes us that he is in the market for a steam shovel suitable for irrigation work.

GAS PRODUCING PLANTS.—Bridgewater, N. S.—We are advised that D. E. Blake, Bridgewater, N. S., desires catalogs and information relative to gas producing plants.

SCHOOL FURNITURE AND FITTINGS.—Dunedin, New Zealand.—We are in receipt of a letter from Edmund Anscombe, 134 Princes St., Dunedin, New Zealand, stating that he wishes catalogs of school furniture and fittings.

INDUSTRIAL NOTES.

THE AMERICAN WATER SOFTENER CO., of 1011 Chestnut St., Philadelphia, has recently taken over the business of the Hungerford Filter Corporation, and is now sole manufacturer of the Hungerford filter.

THE RUST BOILER CO., Pittsburg, Pa., reports the sale of six 608-HP. Rust water-tube boilers to the Seaboard Portland Cement Co., Alsen, N. Y. The latter company is equipping a large cement plant with modern machinery and appliances.

THE BRISTOL CO., Waterbury, Conn., states that it is about to erect another new addition to the present plant. This addition is to be 53 × 170 ft., three stories high. This additional space is made necessary by the increased demand for "Bristol's" Recorders and "Bristol's" Patent Steel Belt Lacing.

THE ATLANTIC CO., INC., Norfolk, Va., engineers and contractors, now has on hand the contract for the grading for the large new terminal yards of the Tidewater Ry. Co. at Sewells Point, Va. They have also contract for the construction and equipment of a hydro-electric power plant at Boonton, N. J., for Benjamin Nicoll.

DODGE & DAY, Engineers and Constructors, of Philadelphia, have submitted a betterment report covering the entire factory of Fayette R. Plumb, Inc., of Frankford, Pa., and are now engaged in making extensive alterations to the forge shops. When this work is finished, other departments will be taken up, and ultimately the entire plant will be remodeled.

THE STANDARD ROLLER-BEARING CO., of Philadelphia, Pa., has increased its capital of $3,500,000 to $5,000,000. Large additions are now being made to the plant and equipment for the purpose of enlarging their department for the manufacture of roller bearings for shafting hangers, and also for the establishment of an entirely new department for the manufacture of roller bearings for trolley cars.

THE BUFFALO FORGE CO., of Buffalo, N. Y., reports that, among orders for foreign shipments recently received by the company is one of special interest, covering a horizontal center crank compound automatic engine, 13 × 20 × 14, for direct connection to a General Electric Company's generator, this unit to be used for the electric illumination of the power of Noshiro, which is located on the northwest coast of Japan.

J. H. WAGENHORST & CO., Youngstown, O., manufacturers of electric blue printing machines, report among recent sales: E. R. Thomas-Detroit Co., Detroit, Mich.; J. Flood Walker, San Antonio, Texas; Luzerne Engineering Co., Hazleton, Pa.; Surveyor General's Office, Cheyenne, Wyo.; J. E. Myers, Penn Station, Pa.; Harris Automatic Press Co., Niles, O.; American Thread Co., Holyoke, Mass.; Phoenix Mfg. Co., Eau Claire, Wis.

THE GENERAL FIREPROOFING CO., Youngstown, O., has secured control of the sale of Universal corner bead in the United States, through a contract just effected with the manufacturer. The Rogers-Shear Co., of Warren, Pa. Universal corner bead is used as reinforcement for plastered corners, and, as it may be made to bend uniformly, it is also used as a finish around windows, on arches, ovals, etc., doing away with the necessity for combustible wood trim.

THE AMERICAN STEEL & WIRE CO., after having in operation a 12,500-HP. We-Fu-Go water softening and purifying system for six months at their Donora Works, have just placed an order with Wm. B. Scaife & Sons Co., of Pittsburg, Pa., for a 25,000-HP. We-Fu-Go system, consisting of eight large treating and settling tanks and eight mechanical gravity filters, for their Newburg Steel Works at Cleveland, Ohio. Other sales reported by Wm. B. Scaife & Sons Co. are: Rochester & Pittsburg Coal & Iron Co., Punxsutawney, Pa., 2,250-HP. We-Fu-Go system (third order); Shenango Furnace Co., Sharpsville, Pa., 8,000-HP. We-Fu-Go system. Armstrong Cork Co., Oakdale, Pa., 500-HP. We-Fu-Go system; Fostoria Glass Co., Moundsville, W. Va., 350-HP. We-Fu-Go system: The Allen & Wheeler Co., Troy, O., 200-HP. We-Fu-Go system; Stone & Webster Engineering Corporation, Boston, Mass., 2,500-HP. We-Fu-Go system for Jacksonville Electric Co., Jacksonville, Fla.; The Paterson Parchment Paper Co., Passaic, N. J., 150,000-gallon per hour We-Fu-Go continuous system.

THE ALLIS-CHALMERS CO., Milwaukee, Wis., reports that the steam end of the 6,000-KW. Allis-Chalmers turbine alternator unit, which was recently shipped to the Kings County Electric Light Co., of Brooklyn, a subsidiary company of the Brooklyn Edison Co., is said to be one of the largest and most powerful so far built. As an indication of its size it is interesting to note that a piece of steel forging weighing 240,000 lbs., made by the Bethlehem Steel Co., went into the construction of its spindle.

MAX F. ABBE, President of the Abbé Engineering Co., of New York, has returned after a five months' trip in Europe. He visited England, Belgium, France and Germany. In Germany he made a contract with the Fried. Krupp Aktiengesellshaft Grusonwerk, at Magdeburg-Buckau, for the building in the United States of their celebrated Excelsior Mills, of which the Krupp people have sold 30,000 in various parts of the world. The Abbé Engineering Co. will be ready within a month to supply the trade with mills of this type.

AMONG THE EXHIBITORS at the annual convention of the Central States Water-Works Association, at Wheeling, W. Va., Sept. 17-19, were the following:

NEPTUNE METER CO., New York, N. Y., exhibited various sizes of disk meters and also meter guaranteed against damage from freezing; 2-in. disk meter with protective dome and delivery adjustment; trident-crest inferential type meter for large services, suitable for river water holding large amounts of sediment.

HERSEY MFG. CO., Boston, Mass., exhibiting Hersey detector, disk and rotary meters.

H. MUELLER MFG. CO., Cincinnati, O., showing brass goods, tapping machines, corporation cocks, etc.

THOMSON METER CO., Brooklyn, N. Y., showing Lambert reinforced disk meters.

PITTSBURG METER CO., Pittsburg, Pa., exhibiting Eureka current and Keystone disk meters.

RENSSELAER MFG. CO., Troy, N. Y., showing Corey solid stream frost-proof fire hydrant.

NATIONAL METER CO., New York, N. Y., showing sectional models of four different styles of meters, three of them displacement meters, and the other of a current type.

GARLOCK PACKING CO., Cleveland, O., showed line of packing.

ANDERSON COUPLING CO., Portland, Conn., exhibited brass goods and Anderson patent coupling.

MODERN IRON WORKS, Quincy, Ill., showed the Quin-See water service box.

TURBINE METER CO., Pittsburg, Pa., a new meter concern, showed ⅝-in. turbine meters.

PITTSBURG FILTER MFG. CO., Pittsburg, Pa., exhibited literature and photographs showing filtration plants at Lorain and elsewhere.

THE PITOMETER CO., New York and Chicago, pitometers for measuring flow of water in pipes, also pump slip indicators.

CENTRAL FOUNDRY CO., New York, exhibiting the Universal gas and water pipe.

NATIONAL WATER MAIN CLEANING CO., New York, N. Y., showed as its exhibit the water mains of Wheeling before and after cleaning, with 75% increase in volume of water.

UNION WATER METER CO., Worcester, Mass., exhibiting King disk, Union rotary and Columbia meters.

THE A. P. SMITH MFG. CO., Newark, N. J., exhibiting their usual line.

H. W. CLARK, Mattoon, Ill., Clark meter box.

LUDLOW VALVE MFG. CO., John L. Sybrandt, Pittsburg, Pa., showing aluminum models of fire hydrants and valves and descriptive literature of air compressors.

THE COLUMBIAN ROPE CO., of Auburn, N. Y., will install an extensive new electric generating and motor equipment recently ordered from Allis-Chalmers Company, Milwaukee. The generator is to be a 940-KW., 60-cycle machine, wound for three-phase current, and designed to operate at 120 r.p.m. Two 30-KW. exciters are provided, one engine and the other motor-driven. The motors, all of which are standard Allis-Chalmers type, with bearings having sealed end boxes so designed as to exclude dust and flying particles of metal, will be suspended from the ceiling. They include four 150-HP. for 600 r.p.m., two 100-HP. machines of the same speed, and a 20-HP. motor with a speed of 900 r.p.m. This equipment includes three 40-KW. transformers for use on the lighting system. A five-panel switchboard, built of blue Vermont marble, comprises three feeder panels, a generator and an exciter panel.

TRADE PUBLICATIONS.

METALLIC PACKING.—The Cancos Mfg. Co., 146 N. 2d St., Philadelphia. Folder, 5 × 11 ins.; pp. 6; illustrated.

The "Black Squadron" metallic-wedge packing is succinctly described in this folder.

"HOW TO CLEAN A BOILER."—The H. W. Johns-Manville Co., 100 William St., New York City. Folder; 3½ × 6 ins.; pp. 4.

This folder describes the uses and properties of "Magic Compound."

OIL ENGINES.—The De La Vergne Machine Co., foot of E. 138th St., New York City. Folder 4 × 9 ins.; pp. 8; illustrated.

The De La Vergne 2-cycle vertical oil engine, without carburetor or electrical ignition, is fully described in this folder.

"STEAM AND WATER SPECIALTIES."—The Golden-Anderson Valve Specialty Co., Fulton Building, Pittsburg. Catalogue No. 9; paper; 5½ × 8 ins.; pp. 56; illustrated.

Various types of valves, steam traps, water-level regulators, etc., are fully described here. Prices are given.

METALLIC PACKING.—The Cook Mfg. Co., Louisville, Ky. Paper; 6½ × 3½ ins.; pp. 32; illustrated.

The Cook metallic packing, for heavy service in steam, gas and air engines, is fully described in this pamphlet.

ROOFING.—Barrett Mfg. Co., New York and Chicago. Paper; 4½ × 7 ins.; pp. 12; illustrated.

This pamphlet gives specifications for coal-tar pitch and felt waterproofing, covered with slag, gravel or tile. It may be applied to wood or concrete roofs.

PAINT.—A. Grothwell, 136 Liberty St., New York, N. Y. Paper; 3¼ × 6 ins.; pp. 4.

This contains a brief notice of roof paints, acid and damp-proof compounds, boiler paint, and preservative and insulating compositions.

"TOBIN BRONZE."—The Ansonia Brass & Copper Co., 99 John St., New York City. Paper; 4 × 7 ins.; pp. 34; illustrated.

The sole makers of this well-known structural alloy here set forth its properties and many applications. Tables of weights, strengths, etc., are given.

CORE DRILLS.—Ingersoll-Rand Drill Co., 11 Broadway, New York, N. Y. Paper; 5½ × 3¼ ins.; pp. 19; illustrated.

The core drills described are of the Davis "calyx" diamondless type for use in prospecting, sinking driven wells, and making test borings for foundations, etc.

ELECTRIC FREIGHT CONVEYORS.—Spence Mfg. Co., St. Paul, Minn. Paper; 6¾ × 8¾ ins.; pp. 8; illustrated.

This pamphlet shows a portable conveyor used for handling freight between docks onto steamers. Views show one of the conveyors in use at the Great Northern Steamship Co.'s dock at Seattle.

METALLIC PACKING.—The H. W. Johns-Manville Co., 100 William St., New York City. Catalogue No. 101; paper; 4½ × 7 ins.; pp. 16; illustrated.

This catalogue describes the Morris metallic packing, manufactured by the Morris Metallic Packing Co., of Philadelphia. This packing is suited to all heavy service.

TEMPERATURE REGULATORS FOR CARS.—The Gold Car Heating & Lighting Co., 17 Battery Place, New York City. Paper; 9 × 12 ins.; pp. 14; illustrated.

This pamphlet outlines the conditions to be met in car heating, and then describes the application of the Gold system to these conditions.

AIR COMPRESSORS.—The American Air Compressor Works, 26 Cortlandt St., New York City. Bulletin No. 18; paper; 6 × 9 ins.; pp. 20; illustrated.

This bulletin illustrates and describes a few of the company's line of compressors, especially the solid box bed type. Both belt-driven and steam-actuated compressors are shown.

POWER PUMPS.—The Goulds Mfg. Co., Seneca Falls, N. Y. Paper; 4½ × 8½ ins.; pp. 48; illustrated.

Applications of the Goulds triplex power pumps to all uses and conditions are described in this pamphlet. Electric drainage and sinking pumps for mines are included in the line shown.

CONVEYING MACHINERY.—Howe Scale Co. of Illinois, 48 E. Lake St., Chicago. Leather; 5¾ × 8½ ins.; pp. 47; illustrated.

This pamphlet is devoted to machinery for elevating and conveying freight, packages, etc., and for handling material in bulk, such as coal, coke, crushed stone, etc. Coal screens and locomotive coaling stations are included. An inclined conveyor for freight trucks and a conveyor for handling freight across a pier from ships to cars are among the specialties.

(Continued on page 116.)

CONTRACT PRICES.

WATER PIPE.—New Orleans, La.—Bids were received by the Sewerage and Water Board, George G. Earl, Gen. Supt., on Sept. 4 for hauling and laying approximately 250 miles of 4-in. to 30-in. c.-i. water pipe, aggregating about 26,000 tons, contracts "15-W," "16-W," "17-W," and "18-W." The bid of the lowest bidder on each contract has been accepted by the Board. In detail the bids were as follows—(A) Irwin Bros., New Orleans; (B) M. O'Herron & Co., New Orleans; (C) A. L. Patterson & Co., Macon, Ga.; (D) General Contracting Co., New Orleans; (E) Southern Contracting Co., New Orleans:

Contract "15-W":	Quantity.	(A)	(B)
Loading pipe from cars or wharf to wagon and unloading from wagon, per ton of 2,000 lbs.	5,000 tons	$0.50	$0.75
Loading pipe from cars or wharf and properly piling same in yard, per ton of 2,000 lbs.	200 tons	.50	.75
Loading from yard and unloading at point of delivery, per ton of 2,000 lbs.	200 tons	.50	.75
Each 100 ft. of haul from point of loading to point of unloading, per ton of 2,000 lbs.	420,000 tons	.02	.01½
24-in. water pipe	500 lin. ft.	1.50	1.75
20-in. water pipe	500 lin. ft.	1.20	1.50
16-in. water pipe	500 lin. ft.	.80	.90
12-in. water pipe	17,100 lin. ft.	.60	.65
10-in. water pipe	100 lin. ft.	.45	.50
8-in. water pipe	500 lin. ft.	.38	.40
6-in. water pipe	167,200 lin. ft.	.35	.37
4-in. water pipe	152,800 lin. ft.	.30	.32
Furnishing on ditch:			
24-in. valve	1	225.00	225.00
20-in. valve	1	165.00	156.00
16-in. valve, valve to be set vertically	1	83.00	82.00
16-in. valve, valve to be set horizontally	1	105.00	105.00
12-in. valves	6	45.00	32.50
10-in. valve	1	30.00	30.00
8-in. valve	1	23.00	22.00
6-in. valves	154	17.00	17.00
4-in. valves	124	11.00	10.60
4-in. hydrants, with 2—2½-in. nozzles, on ditch	400	30.00	30.30
4-in. hydrants, with 2—2½-in. and one steamer nozzle, on ditch	10	33.00	33.30
6-in. hydrants, with 2—2½-in. and one steamer nozzle, on ditch	10	40.00	41.50
Setting each hydrant and furnishing concrete base and porous filling for same	420	6.00	6.00
4-in. Rapp screw plugs, each	10	1.40	2.40
6-in. Rapp screw plugs, each	10	1.70	3.60
8-in. Rapp screw plugs, each	10	2.50	3.60
10-in. Rapp screw plugs, each	5	4.00	3.60
12-in. Rapp screw plugs, each	5	7.00	3.60
All c.-i. manholes, covers and frames, per lb.	26,000 lbs.	.06	.05
Lumber in place under pipe or under valve chambers, per 1,000 ft. B. M.	30,000 ft. B. M.	15.00	13.00
Blocks and wedges, per 1,000 ft. B. M.	55,000 ft. B. M.	30.00	30.00
Extra excavation, per cu. yd.	600 cu. yds.	1.50	2.00
Brick masonry, per cu. yd.	50 cu. yds.	7.00	15.00
Extra concrete masonry, per cu. yd.	50 cu. yds.	12.00	10.50
4-in. vitrified clay drain tile, in place, per lin. ft.	100 lin. ft.	.50	.60
Asphalt	7,700 sq. yds.	4.00	4.50
Belgian block	700 sq. yds.	3.00	3.00
Vitrified brick	100 sq. yds.	3.00	3.00
Square block	7,800 sq. yds.	.70	1.00
Cobble stone	11,600 sq. yds.	.60	.50
Gravel	11,700 sq. yds.	.60	.50
Shell	6,300 sq. yds.	.50	.60
Plank	14,600 lin. ft.	.40	.20
Bitulithic pavement	100 sq. yds.	4.00	4.00
Schillinger	4,000 sq. yds.	1.20	1.50
Flagging	1,400 sq. yds.	.90	.50
Brick	4,900 sq. yds.	.80	.50
Old curbing removed and reset, per lin. ft.	300 lin. ft.	.40	.50
Cinders furnished and placed	20 cu. yds.	1.00	1.50
Oyster shells furnished and placed	20 cu. yds.	1.00	3.00
Sand furnished and placed	20 cu. yds.	1.50	3.00
Gravel furnished and placed	20 cu. yds.	2.50	3.00
Clam shells furnished and placed	20 cu. yds.	1.50	3.00
Total		$225,789	$233,862

Contract "16-W":	Quantity.	(C)
Loading pipe from cars or wharf to wagon and unloading from wagon, per ton of 2,000 lbs.	8,500 tons	$1.00
Loading pipe from cars or wharf and properly piling same in yard, per ton of 2,000 lbs.	200 tons	1.00
Loading from yard and unloading at point of delivery, per ton of 2,000 lbs.	200 tons	1.00
Each 100 ft. of haul	520,000 tons	.03
30-in. water pipe	6,300 lin. ft.	2.63
24-in. water pipe	4,700 lin. ft.	1.30
20-in. water pipe	13,900 lin. ft.	1.20
16-in. water pipe	500 lin. ft.	.85
12-in. water pipe	43,300 lin. ft.	.70
10-in. water pipe	100 lin. ft	.60
8-in. water pipe	500 lin. ft.	.50
6-in. water pipe	152,500 lin. ft.	.34
4-in. water pipe	111,000 lin. ft.	.30
Laying all 30-in. flexible pipe	300 lin. ft.	16.00
Laying all 12-in. flexible pipe	300 lin. ft.	16.00
Furnishing on ditch:		
30-in. valves	4	363.00
24-in. valves	4	200.00
20-in. valves	10	140.00
16-in. valve, valve to be set vertically	1	75.00
16-in. valve, valve to be set horizontally	1	97.00
12-in. valves	45	38.00
10-in. valve	1	27.50
8-in. valve	1	21.00
6-in. valves	215	15.50
4-in. valves	160	10.00
4-in. hydrants, with 2—2½-in. nozzles, on ditch	480	27.50
4-in. hydrants, with 2—2½-in. and one steamer nozzle	10	29.70
6-in. hydrants, with 2—2½-in. and one steamer nozzle	10	37.40
Setting each hydrant and furnishing concrete base and porous filling	500	5.00
4-in. Rapp screw plugs, each	10	1.75
6-in. Rapp screw plugs, each	10	2.50
8-in. Rapp screw plugs, each	10	3.25
10-in. Rapp screw plugs, each	5	6.00
12-in. Rapp screw plugs, each	5	7.50
All c.-i. valve boxes, manhole covers and frames, per lb.	45,000 lbs.	.05
Lumber in place under pipe or under valve chambers, etc., per 1,000 ft. B. M.	40,000 ft. B. M.	30.00
Blocks and wedges, per 1,000 ft. B. M.	55,000 ft. B. M.	30.00
Round piling in place, per lin. ft.	200 lin. ft.	1.20
Creosoted piling in place, per lin. ft.	200 lin. ft.	1.80
Extra excavation, per cu. yd.	1,000 cu. yds.	1.50
Brick masonry, per cu. yd.	100 cu. yds.	20.00
Extra concrete masonry, per cu. yd.	50 cu. yds.	15.00
4-in. vitrified clay drain tile, in place, per lin. ft.	100 lin. ft.	.80
Asphalt	5,000 sq. yds.	2.80
Belgian block	300 sq. yds.	1.40
Vitrified brick	2,600 sq. yds.	1.10
Square block	2,500 sq. yds.	.30
Cobble stone	15,500 sq. yds.	.25
Gravel	10,300 sq. yds.	.20
Shell	5,300 sq. yds.	.10
Plank	1,000 lin. ft.	.10
Bitulithic pavement	100 sq. yds.	4.00
Schillinger	1,600 sq. yds.	.75
Flagging	700 sq. yds.	.20
Brick	8,000 sq. yds.	.30
Old curbing removed and reset, per lin. ft.	300 lin. ft.	.30
Cinders furnished and placed	20 cu. yds	1.00
Oyster shells furnished and placed	20 cu. yds	1.00
Sand furnished and placed	20 cu. yds	1.00
Gravel furnished and placed	20 cu. yds.	3.00
Clam shells furnished and placed	20 cu. yds.	2.00
Total		$256,167

Contract "17-W":	Quantity.	(B)	(D)	(A)
Loading pipe from cars or wharf to wagon and unloading from wagon, per ton of 2,000 lbs.	7,600 tons	$0.75	$0.50	$0.50
Loading pipe from cars or wharf and properly piling in yard, per ton of 2,000 lbs.	200 tons	.75	.50	.50
Loading from yard and unloading at point of delivery, per ton of 2,000 lbs.	200 tons	.75	.50	.50
Each 100 ft. of haul from point of loading to point of unloading, per ton of 2,000 lbs.	470,000 tons	.01½	.01	.02
24-in. water pipe	500 lin. ft.	2.00	1.52	1.35
20-in water pipe	3,200 lin. ft.	1.10	1.12	1.20
16-in. water pipe	12,900 lin. ft.	.80	.82	1.00
12-in. water pipe	37,200 lin. ft.	.60	.62	.65
10-in. water pipe	100 lin. ft.	.50	.52	.50
8-in. water pipe	500 lin. ft.	.45	.42	.40
6-in. water pipe	207,000 lin. ft.	.34	.37	.35
4-in. water pipe	148,000 lin. ft.	.29	.32	.30
Furnishing on ditch:				
24-in. valve	1	225.00	200.00	225.00
20-in. valve	1	156.00	140.00	165.00
16-in. valves, valves to be set vertically	12	82.00	75.00	83.00
16-in. valves, valves to be set horizontally	3	105.00	100.00	105.00
12-in. valves	36	42.50	36.00	45.00
10-in. valve	1	30.00	25.00	30.00
8-in. valve	1	22.00	20.00	23.00
6-in. valves	360	17.00	15.00	17.00
4-in. valves	200	10.60	10.00	11.00
4-in. hydrants, with 2—2½-in. nozzles on ditch	540	30.30	25.00	30.00
4-in. hydrants, with 2—2½-in. and one steamer nozzle, on ditch	10	33.30	27.50	33.00
6-in. hydrants, with 2—2½-in. and one steamer nozzle, on ditch	10	41.50	35.00	40.00
Setting each hydrant and furnishing concrete base and porous filling	560	6.00	5.00	6.00
4-in. Rapp screw plugs	40	2.40	1.25	1.40
6-in. Rapp screw plugs	100	3.60	1.65	1.70
8-in. Rapp screw plugs	10	3.60	2.50	2.50
10-in. Rapp screw plugs	5	3.60	4.00	4.00
12-in. Rapp screw plugs	5	3.60	7.50	7.00
All c.-i. valve boxes, manhole covers and frames, per lb.	58,000	.05	.05	.06
Lumber in place under pipe or under valve chambers, per 1,000 ft. B. M.	50,000 ft. B. M.	13.00	30.00	30.00
Blocks and wedges, per 1,000 ft. B. M.	70,000 ft. B. M.	30.00	30.00	30.00
Round piling in place, per lin. ft.	200 lin. ft.	1.00	2.00	1.00
Creosoted piling in place, per lin. ft.	200 lin. ft.	1.00	3.00	1.60
Extra excavation, per cu. yd.	1,000 cu. yds.	2.00	.85	1.50
Brick masonry, per cu. yd.	50 cu. yds.	10.00	15.00	12.00
Extra concrete masonry, per cu. yd.	50 cu. yds.	10.00	13.00	12.00
4-in. vitrified clay drain tile in place, per lin. ft.	100 lin. ft.	.60	.50	.60
Asphalt	2,500 sq. yds.	4.50	4.00	4.50
Belgian block	100 sq. yds.	3.00	4.00	3.00
Vitrified brick	2,400 sq. yds.	3.00	3.00	3.00
Square block	100 sq. yds.	1.00	.75	.90
Cobble stone	8,400 sq. yds.	.50	.75	.80
Gravel	4,300 sq. yds.	.50	.60	.70
Shell	3,400 sq. yds.	.50	.50	.70
Plank	1,000 lin. ft.	.20	.30	.40
Bitulithic pavement	100 sq. yds.	4.00	5.00	5.00
Schillinger	1,100 sq. yds.	1.50	1.80	1.20
Flagging	500 sq. yds.	.50	.75	.90
Brick	3,000 sq. yds.	.50	.75	.90
Old curbing removed and reset, per lin. ft.	300 lin. ft.	.50	.25	.40
Cinders furnished and placed	20 cu. yds.	1.50	2.00	1.50
Oyster shells furnished and placed	20 cu. yds.	3.00	2.50	1.50
Sand furnished and placed	20 cu. yds.	3.00	2.00	1.50
Gravel furnished and placed	20 cu. yds.	3.00	4.00	3.00
Clam shells furnished and placed	20 cu. yds.	3.00	2.50	2.00
Total		$237,791	$242,396	$251,595

Contract "18-W":	Quantity.	(D)	(B)	(E)
Loading pipe from cars or wharf to wagon and unloading from wagon, per ton of 2,000 lbs.	4,000 tons	$0.50	$0.75	$0.50
Loading pipe from cars or wharf and properly piling in yard, per ton of 2,000 lbs.	200 tons	.50	.75	.50
Loading from yard and unloading at point of delivery, per ton of 2,000 lbs.	200 tons	.50	.75	.50
Each 100 ft. of haul from point of loading to point of unloading, per ton of 2,000 lbs.	240,000 tons	.01	.01½	.01
24-in. water pipe	500 lin. ft.	1.50	1.75	2.00
20-in water pipe	500 lin. ft.	1.10	1.50	1.75
16-in. water pipe	1,200 lin. ft.	.80	.80	1.50
12-in. water pipe	30,800 lin. ft.	.60	.65	.80
10-in. water pipe	100 lin. ft.	.50	.60	.75
8-in. water pipe	800 lin. ft.	.40	.50	.50
6-in. water pipe	102,200 lin. ft.	.35	.35	.40
4-in. water pipe	80,700 lin. ft.	.30	.28	.30
Furnishing on ditch:				
24-in. valve	1	200.00	225.00	225.00
20-in. valve	1	140.00	156.00	150.00
16-in. valve, valve to be set vertically	1	75.00	82.00	100.00
16-in. valve, valve to be set horizontally	1	100.00	105.00	110.00
12-in. valves	27	36.00	42.50	45.00
10-in. valve	1	25.00	30.00	35.00
8-in. valve	1	20.00	22.00	25.00
6-in. valves	120	15.00	17.00	17.00
4-in. valves	100	10.00	10.00	12.00
4-in. hydrants, with 2—2½-in. nozzles on ditch	160	25.00	30.30	30.00
4-in. hydrants, with 2—2½-in. and one steamer nozzle, on ditch	5	27.50	33.30	35.00
6-in. hydrants, with 2—2½-in. and one steamer nozzle, on ditch	5	35.00	41.50	45.00
Setting each hydrant and furnishing concrete base and porous filling	170	5.00	6.00	7.00
4-in. Rapp screw plugs	30	1.25	2.40	1.25
6-in. Rapp screw plugs	20	1.65	3.60	1.75
8-in. Rapp screw plugs	10	2.50	3.60	2.50
10-in. Rapp screw plugs	5	4.00	3.60	4.50
12-in. Rapp screw plugs	5	7.50	3.60	8.00
All c.-i. valve boxes, manhole covers and frames, per lb.	23,000 lbs	.05	.05	.06
Lumber in place under pipe or under valve chambers, per 1,000 ft. B. M.	20,000 ft. B. M.	30.00	13.00	30.00
Blocks and wedges, per 1,000 ft. B. M.	36,000 ft. B. M.	30.00	30.00	30.00
Round piling in place, per lin. ft.	200 lin. ft.	2.00	1.00	2.00
Creosoted piling in place, per lin. ft.	200 lin. ft.	3.00	1.00	3.00
Extra excavation, per cu. yd.	400 cu. yds.	.85	2.00	1.00
Brick masonry, per cu. yd.	20 cu. yds.	15.00	10.00	17.00
Extra concrete masonry, per cu. yd.	20 cu. yds.	13.00	10.00	15.00
4-in. vitrified clay drain tile in place, per lin. ft.	100 lin. ft.	.50	.60	.65
Asphalt	500 sq. yds.	4.00	4.50	4.00
Belgian block	100 sq. yds.	4.00	3.00	4.00
Vitrified brick	100 sq. yds.	3.00	3.00	4.00
Square block	3,000 sq. yds.	.75	1.00	.75
Cobble stone	6,700 sq. yds.	.75	.50	.75
Gravel	500 sq. yds.	.60	.50	.65
Shell	600 sq. yds.	.50	.50	.60
Plank	3,000 lin. ft.	.30	.50	30.00
Bitulithic pavement	100 sq. yds.	5.00	4.00	5.00
Schillinger	300 sq. yds.	1.80	1.50	2.00
Flagging	100 sq. yds.	.75	.50	1.00
Brick	1,000 sq. yds.	.75	.50	1.00
Old curbing removed and reset, per lin. ft.	200 lin. ft.	.25	.50	.30
Cinders furnished and placed	10 cu. yds.	2.00	1.50	3.00
Oyster shells furnished and placed	10 cu. yds.	2.50	3.00	3.50
Sand furnished and placed	10 cu. yds.	2.00	3.00	3.00
Gravel furnished and placed	10 cu. yds.	4.00	3.00	4.50
Clam shells furnished and placed	10 cu. yds.	2.50	3.00	4.00
Total		$113,637	$116,331	$218,495

"HYDRAULIC FORCING PRESSES."—The Watson-Stillman Co., New York City. Catalogue No. 70; paper; 6 × 9 ins.; pp. 70; illustrated.

This catalogue is an assortment of sheets selected from over 800 pages of the company's descriptive matter, especially pertaining to hydraulic presses for many industrial purposes.

MARLIN REPEATING RIFLES AND SHOTGUNS.—The Marlin Firearms Co., New Haven, Conn. 5 × 8 ins.; pp. 136.

This catalogue describes in great detail the firearms made by this long-established firm. Rifles are made in calibers from 22 to 45. The catalogue contains much useful information on the use, care and adjustment of firearms.

ORE-HANDLING LOCOMOTIVE CRANES.—The Brown Hoisting Machinery Co., Cleveland. Circular L; paper; 6 × 9 ins.; pp. 28; illustrated.

In this circular attention is especially called to the "Brownhoist" locomotive crane, equipped with grab-bucket, for handling ore, coal, slag, sand, etc. Photographs are given showing numerous applications of the apparatus.

"ECONOMICAL MACHINERY FOR THE COAL MINE."—The Ingersoll-Rand Co., 11 Broadway, New York City. Paper; 5½ × 3¼ ins.; pp. 23; illustrated.

This pamphlet is issued to describe briefly such apparatus of the company's line as is of economic application in coal mining. It "simply sketches with broad strokes" apparatus and machinery described more fully in the catalogues of the company.

"STEEL MINE TIMBERS."—The Carnegie Steel Co., Pittsburg. Paper; 5 × 7½ ins.; pp. 38; illustrated.

Prefaced by a chapter descriptive of the advantages of steel over wooden timbering, and supplemented by 25 pages of strength data, tables, etc., this pamphlet briefly sets forth a line of standard struts and beams, made from conventional shapes, adapted to mine use.

STEEL TOOLS, STOCK, ETC.—The Scully Steel & Iron Co., Halsted and Fulton Sts., Chicago. Stock list, Sept. and Oct., 1907; paper; 4½ × 7 ins.; pp. 144; illustrated.

This very complete stock list covers all kinds of machine and hand tools—mainly such as are used about boiler works (no lathes, etc., are shown). Prices are given. The catalogue is supplemented by 24 pages of tables of strength data, etc.

FORGES, BLOWERS, ETC.—The Buffalo Forge Co., Buffalo, N. Y. General catalogue No. 177; paper; 3¾ × 6¾ ins.; pp. 246; illustrated.

It is hardly necessary to call especial attention to this other than to say that it is the very up-to-date 1907 edition of a catalogue of this company's well-known line. The company's centrifugal pumps, high-speed engines and ventilating machinery form interesting parts of the catalogue.

CONVEYORS AND COAL-HANDLING MACHINERY.—Steel Cable Engineering Co., 92 State St., Boston, Mass. Paper; 10 × 8 ins.; pp. 43; illustrated.

This catalogue deals mainly with coal and ash handling machinery, in which the buckets or flights are attached to cross pieces having wheels at the ends and clamped at the middle to the operating cables. The apparatus and its several parts are described in considerable detail, and the illustrations show a number of interesting plants. Carriers for logs, and trolley carriers for carcases in packing establishments are included.

LOCOMOTIVES. — Baldwin Locomotive Works, Philadelphia, Pa. Paper; 9 × 6 ins.; pp. 31; illustrated.

Bulletin No. 63 of "Record of Recent Construction" gives views and dimensions of engines of different types, including several freight engines of the 2-8-0 or consolidation class. These range from 163,390 lbs. to 236,850 lbs. total weight, with 143,290 lbs. and 209,950 lbs. respectively on the drivers. There are two interesting switch engines for the Chicago & Eastern Illinois Ry.; one of the 0-8-0 class, weighing 223,950 lbs., and the other of the 0-6-0 class, weighing 156,-500 lbs.

WATER METERS.—Turbine Water Meter Co., Pittsburg, Pa. Paper; 4 × 6 ins.; pp. 8; illustrated.

The style of water meter here described is indicated by the name given it. It is claimed for the meter that it does not baffle the water pressure, that it registers every gallon passed, and will pass all the water that the pipe in which it is placed will pass, and that it will stand freezing and is "absolutely self-cleaning." The turbine measuring wheel is made of hard rubber. The pinion of the measuring wheel is carried on water-flooded ball bearings. The body of the meter is made of red brass.

LOCOMOTIVES.—American Locomotive Co., 111 Broadway, New York, N. Y. Paper; 9 × 6 ins.; pp. 40; illustrated.

This pamphlet is devoted to engines of the "Prairie" or 2-6-2 type for heavy passenger and fast freight service. Views and dimensions are given of 15 engines, ranging from 136,000 lbs. (108,000 lbs. on the drivers) to 245,000 lbs. (170,000 lbs. on the drivers). The largest simple cylinders are 22 × 28 ins., a two-cylinder compound, having cylinders 22 × 28 ins. and 35 × 28 ins. There is also a four-cylinder tandem compound, with cylinders 16 × 28 and 28 × 28 ins. The driving wheels range from 50 ins. to 80 ins. diameter.

ELEVATING, CONVEYING AND TRANSMISSION MACHINERY.—Weller Mfg. Co., 118 North Ave., Chicago. Cloth; 5½ × 8 ins.; pp. 437; illustrated.

This is a general catalogue and price list of machinery, appliances and supplies in this line of work. Belt, spiral and chain conveyors, barrel and sack elevators, and grain spouts and car loaders are all included, with numerous auxiliary devices. Pumps, scales, hose, pullies, belting, etc., are included in the long list of supplies. Several views show grain elevators and other plants equipped with this company's machinery.

PUMPING MACHINERY. — The Buffalo Steam Pump Co., Buffalo, N. Y. Catalogue No. 187; paper; 6 × 9 ins.; pp. 132; illustrated.

Section 1 of this attractive catalogue is devoted to steam and power pumps; Section 2 to centrifugal and turbine pumps. In Section 2 nearly all illustrations are entirely new ones. The illustration of individual parts throughout the catalogue, as well as of complete apparatus, photographically and sectionally, is a feature which will greatly facilitate the ordering of repair parts by users. Tables of data and information are found in the back.

MECHANICAL WATER FILTERS.—Roberts Filter Mfg. Co., Philadelphia, Pa. Stiff paper; 9 × 6 ins.; pp. 72; illustrated.

Although this company builds gravity filters, the catalogue before us relates almost wholly to filters of the pressure type, including a variety of controllers, coagulant feeds and other devices. Filters for domestic, institutional and city supplies are described and illustrated. The strainer system employed for the Roberts filter has circumferential waterways beneath a flat plate, the openings being flush with the sides of the plates. For filters up to 5 ft. in diameter, the strainers are screwed into a false bottom, and for larger filters they are screwed into strainer pipes.

"CRUSHING ROLLS."—The Allis-Chalmers Co., Milwaukee. Revised bulletin No. 1412; paper; 8 × 10½ ins.; pp. 40; illustrated.

Particular attention may be directed to this bulletin, because, in addition to illustrating and describing the company's line of crushing rolls and accessories, it contains very complete tables of dimensions and lists of parts. This, in view of the great numbers of these rolls now in service all over the world—made by this company and its predecessors in the mining machinery field, Frazer & Chalmers and the Gates Iron Works—will greatly facilitate the ordering of repair parts by present users.

WATER FILTRATION AND SOFTENING.—Pittsburg Filter Mfg. Co., Pittsburg, Pa. Stiff paper; 6 × 9 ins.; pp. 109; illustrated.

This pamphlet might almost be described as a treatise on mechanical filtration and allied subjects. Besides gravity and pressure filters, balanced control valves, loss of head gages, effluent controllers, coagulant feed devices, and operating and sample tables, are described. The strainers shown are in the form of short capped cylinders, with perforations both in tops and sides. The wash trough used by this company, instead of being square or round, is so flattened and curved as to minimize the resistance to the upward flow of the water by diverting it gently around the trough. A large part of the space of the pamphlet is devoted to illustrations and brief descriptions of a number of water filtration and softening plants in various parts of the United States and a few in other countries.

SEAMLESS STEEL SPECIALTIES.—Pressed Steel Tank Co., Milwaukee, Wis. Paper; 9 × 6 ins.; pp. 23; illustrated.

These specialties include pressed and drawn seamless tanks and shells for air-brake reservoirs, oil and gas storage, automobile tanks, etc., for test pressure of 150 to 1,000 lbs. Also range boilers, cartridge shells for ordnance, etc. Among the specialties are corrugated seamless steel kegs, barrels and garbage cans.

For other Proposal Advertisements see pages 55, 56, 57, 58, 59, 60, 61, 62 of Advertisements and Construction News page 116.

GARBAGE DISPOSAL.

Board of Street and Water Commissioners of the City of Newark, N. J., Oct. 1, 1907.

Sealed proposals will be received at this office from 3:15 to 3:30 p. m. on Thursday, the tenth day of October, 1907, and opened at the last named hour, at a public meeting of the Board to be held at said time and place, for the collection, removal and disposal of ashes, rubbish material, paper and garbage in the City of Newark for a period of five years beginning January 1, 1908, in accordance with the specifications which may be procured upon application at the office of the Chief Engineer of the Board, City Hall, Newark, N. J. Said specifications provide for the disposal of garbage by reduction, cremation or incineration; the contractor to have until the first of May, 1908, to erect plant for this purpose, or is at liberty to make arrangements with the company now receiving and treating the garbage of the city by reduction process. The city is divided into two districts and the specifications provide for the number of collections to be made per week in each district.

Bid will be a price for the first year and also the amount which is to be added annually thereafter for each of the succeeding years, and the total for the years covered by the contract is to be used in comparing the bids. Each bidder may also state in his bid what decrease in price for each year will be made in the contract if satisfactory arrangements for collecting stations and transportation in approved form of trolley cars between midnight and 5 a. m. can be made with the street railway service.

Each bid is to be accompanied by the agreement of a surety company authorized to do business in New Jersey that the bidder will inter into contract, if awarded to him, and will execute surety company bond for $25,000 for the faithful performance of the contract.

By direction of the Board of Street and Water Commissioners of the City of Newark, N. J.

MORRIS R. SHERRERD, Chief Engineer.

14-1t

LIGHTING.

Kokomo, Ind.

Notice is hereby given that the Board of Public Works of the city of Kokomo, in the State of Indiana will receive, at its office in said city, until ten A. M., on Wednesday, the 8th day of November, 1907, sealed bids for furnishing electric lights for said city, its streets, alleys and public places and public buildings, according to plans and specifications now on file in its office.

Each bidder must file with the clerk of said Board when he files his bid, the usual statutory affidavit against collusion and combination, as provided for in Section 95 of the Municipal Code of the State of Indiana, Acts of 1905.

The successful bidder will be required to give bond, with surety to be approved by the board, to insure the faithful completion and installation of the said work, according to the terms of the contract to be entered into.

The Board reserves the right to reject any and all bids received and readvertise said work.

Dated this 30th day of September, 1907.

J. A. BURKHALTER,
J. F. BERGMAN,
ALVIN McDOWELL,
Board of Public Works.

Attest:
W. T. MECK, City Clerk. 14-1t

PROPOSALS FOR LIMESTONE AND MARBLE WORK. Office of Building for National Museum, Library of Congress, Washington, D. C., October 3, 1907. Sealed proposals for furnishing, delivering and setting in place complete the cut buff Bedford limestone and marble column shafts and marble bases required for the screens in the rotunda of the new building for the National Museum, in this city, will be received at this office until 2 o'clock p. m., on Thursday, October 24, 1907, and publicly opened immediately thereafter. Specifications and other information furnished on application. BERNARD R. GREEN, Superintendent of Construction. 14-3t

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., September 30, 1907.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 24th day of October, 1907, and then opened, for the installation of a flash-light signal system for elevators in the U. S. Custom House Building, New York, N. Y., in accordance with drawing and specification, copies of which may be had at this office or at the office of the Architect, Cass Gilbert, No. 11 East 24th Street, New York, N. Y., at the discretion of the Supervising Architect.

JAMES KNOX TAYLOR, Supervising Architect. 14-2t

Situations Open

WANTED—A first-class track-foreman; must be sober and active and thoroughly understand track work in all its branches. State salary expected and experience. JAMES A. HART CO., 256 Broadway, New York. 14-1t

WANTED—High-class Civil Engineer for Spanish West Indies. Must be capable of Surveys, building Railways, Bridges, etc., etc. Knowledge of some Spanish required. State salary, and references. Address "X. B. 14," Engineering News, New York. 14-1t

Miscellaneous Wants

IMPORTANT OFFICE

in engineering, contracting and financial corporation with able directorate and management, large volume of attractive business on exceptionally profitable terms, independent of competition, large assets and no debts.

Requires active man, good address, business ability, unquestionable character, to invest $30,000 or more on very safe and profitable terms.

Object, to increase cash working capital to $400,000 and to permanently enlist good men—preferably engineers, in the management.

Unusual chance for right party to acquire competence and high business standing.

Requires prompt action. Write personally to

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201 Frick Building, Pittsburg, Pa.

BUSINESS OPPORTUNITY

A rare chance to a business man that can invest $10,000 in a structural and ornamental iron business in the South, near Washington, D. C. Own plant clear and free from debt. Address "S. B. 14," Engineering News, New York. 14-1t

LOCOMOTIVES WANTED

Two 17", 18" or 19" × 24" standard gage Switchers or Saddle Tanks, with short wheel bases.

Also 1½ miles 65 to 75-lb. rails.

T. P. CONARD & CO.,
Harrison Building, Philadelphia. 14-1t

FOR SALE

FOR SALE, CHEAP.

ONE SMITH MIXER

batch, mounted on wheels; 1 Pels large punch; 1 five-foot cubical concrete mixer; 1 Pels shear, cut 15-in. beam. BERNARD ROLF, 39 Cortlandt St., New York. 14-1t

FOR SALE.

INGER'OLL-SERGEANT COMPRESSOR

24 × 26¼ × 30. Class A. Complete with all fittings. A1 condition. Immediate shipment.

RICHARD W. WESTERN,
910 Citizens Bldg., Cleveland, O. 14-2t

FOR SALE.

Structural and Ornamental Plant

Fully equipped with machinery. Large buildings, 4½ acres ground, 50 miles from Washington, D. C. Very CHEAP. Address "W. B. 14," Engineering News, New York. 14-1t

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